

Connie Danuk

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Fidelity Well No. 2577	
Proposed Implementation Date:	Summer of 2006	DNRC - Trust Land Management Division
Proponent:	Fidelity Exploration and Production Company	
Location:	T8N-R59E-Sec 36 NW 1/4	
County:	Fallon	

I. TYPE AND PURPOSE OF ACTION

Fidelity Exploration has requested to construct a natural gas well, pad site, pipeline and access road on the section mentioned above. This section of land is managed by the Montana Department of Natural Resources Eastern Land Office. This NG well will be drilled into the Eagle Formation of the Cedar Creek Field and in the Pennel Unit. The well depth will be approximately 2000 feet. The size of the pad is to be constructed at 200ftX180ft, this will be reduced once drilling operations have been completed. The pad size will be approximately 30X50ft and will be constructed using scoria shale.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

Fidelity has completed the proper applications to begin drilling and construction of the well site. The Eastern land office has completed a field evaluation of the site and surrounding area. The grazing leaseholder has been contacted and is in the process of settling surface damages.

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2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

None

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3. ALTERNATIVES CONSIDERED:

Alternative A- Allow Fidelity to construct the well site and begin drilling. This alternative would continue the current land use of grazing, and mineral (Hydrocarbon) extraction. Plus allow for increased revenue to the school trust through mineral royalties and surface damage payments. All construction of this project will be reclaimed upon termination of the well.

Alternative B- Deny Fidelity the right to begin construction. Current land use of grazing and mineral management would not change. The value of state owned natural gas may not be captured.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Site is composed of mostly clay to silty clay loam. Geologic features in the area include weathered clay buttes, shale hills and some sites of hard pan. Erosion risks in this area are typically moderate to high. Topography on the site is gently rolling

Alternative A- Some soil disturbance will occur at the drill site and pad through cutting and filling to level the pad. There will also be some further cut fill operations on the road with crown building of the road surface. The road will be constructed to all-weather standards. There will also be a minimal amount of disturbance from the

implementation and construction of the pipeline. This disturbance will be minimal to moderate in nature. Any construction would be designed to reduce the amount of erosion on the site.

Alternative B- No Impact.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

Alternative A- No Significant Impact

Alternative B- No Impact

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

Alternative A- Pollutants and Particulates will be increased during the construction of the project. After the completion of the project pollutant and particulate levels will return to near normal.

Alternative B- No Impact

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

Alternative A- There will be disruption to some of the vegetation currently growing at the site. General plant species on this site include Western Wheatgrass, Bluebunch Wheatgrass, Green Needle Grass, Needle and Thread, Blue Grama and various Sedge, Forbs and Shrubs. No rare plant species were noted during the inspection. After the reclamation has taken place the site will be seeded back to native grass species.

Alternative B- No Impact

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

Alternative A- There will be minimal disruption to the wildlife that inhabit the area. The primary species in the area consist of Antelope, Mule Deer, Burrowing Rodents, Jack Rabbits, Raptors, Migratory Prairie birds and others. The entire area is covered with oil and gas wells and all forms of wildlife seem to tolerate it and thrive in the area.

Alternative B- No Impact

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

Alternative A- A search of the Montana Natural Heritage Program database has shown that there are no threatened or endangered species on this section. It also shows no evidence of sensitive species in the area of this tract.

Alternative B- No Impact

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

Alternative A- Alternative A-Upon inspection of the parcels by the Eastern Land Office staff no significant findings were noted on this parcel.

Alternative B- No Impact

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas.

What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

Alternative A- This will temporally change the appearance of the landscape. But the addition of reclamation efforts will make the site aesthetically pleasing after termination of this well project. Noise levels will be increased during the project but will return to normal after the completion.

Alternative B- No Impact

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

Alternative A-This project would have an effect on the amount of limited resources. The amount of natural gas to be extracted is currently unknown. It would not affect other projects in the area because all surrounding gas wells belong to Fidelity

Alternative B- No Impact

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

None

IV. IMPACTS ON THE HUMAN POPULATION
<ul style="list-style-type: none">• RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.• Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.• Enter "NONE" If no impacts are identified or the resource is not present.

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

Alternative A- There may be potential safety risks for laborers but the potential risk is minimal with proper safety efforts.

Alternative B- No Impact

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

Alternative A- It would have a positive effect on Industrial, Commercial and Agricultural Activities and Production.

Alternative B- No Impact

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

Alternative A- This project has the potential to create jobs with further development possibilities.

Alternative B- No Impact

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

Alternative A- Tax Revenue is currently unknown at this time

Alternative B- No Impact

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

Alternative A- Traffic would be increased but this is a remote area so little assistance would be needed.

Alternative B- No Impact

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

Alternative A- No Significant Impact

Alternative B- No Impact

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

Alternative A- No Significant Impact

Alternative B- No Impact

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

Alternative A- No Significant Impact

Alternative B- No Impact

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

Alternative A- No Significant Impact

Alternative B- No Impact

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

Alternative A- No Significant Impact

Alternative B- No Impact

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

Alternative A- Allowing this project would generate revenue for the school trust the amount is currently unknown at this time. Revenue would come in the form of mineral royalties and surface damages

Alternative B- No Impact

EA Checklist Prepared By:	Name: Scott Aye	Date: 6-5-06
	Title: Land Use Specialist	

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative A

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

Minimal and acceptable

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

☐ EIS ☐ More Detailed EA ☒ No Further Analysis

EA Checklist Approved By:	Name: Rick Strohmyer
	Title: Eastern Land Office: Area Manager
Signature: <i>Rick Strohmyer</i>	Date: 6-6-06

DNRC - Trust Land Management Division

CHECKLIST ENVIRONMENTAL ASSESSMENT

PROJECT NAME:	CROWN BUTTE TIMBER SALE
PROPOSED IMPLEMENTATION DATE:	JULY 1, 2006
PROPONENT:	DNRC – HELENA UNIT, 8001 NORTH MONTANA AVE., HELENA, MONTANA 59602
LOCATION:	SECTION 16, T16N, R6E
COUNTY:	CASCADE COUNTY, MONTANA

I. TYPE AND PURPOSE OF ACTION

A. TYPE OF ACTION: CROWN BUTTE TIMBER SALE

The Montana Department of Natural Resources and Conservation (DNRC) is proposing a timber sale/pre-commercial thin near Monarch, Montana in Cascade County. Under this harvest alternative, the DNRC plans to cut approximately 1400 MBF of sawlog material from 262-acres. Noxious weed control and/or monitoring shall continue five years after harvesting has been completed.

The proposed action would be implemented as early as July 1, 2006. Access to harvest/pre-commercial thin units would be through private property, utilizing mostly existing trails. Trail reconstruction would be minimal, as rough forest products would be forwarded to a centralized landing area near Forest Service Road 67. A "Commercial Road Use Permit" would need to be obtained from the Forest Service to haul sawlog material approximately six miles down this graveled spur road. The haul road length would coincide with "Temporary Right-of-Way Deed" that has been granted to the State of Montana by the private landowner, ending October 15, 2008.

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B. PURPOSE OF ACTION:

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• **Enabling Act:**

By the Enabling Act approved February 22, 1889, the Congress of the United States granted to the State of Montana, for common school support, sections sixteen and thirty-six in every township within the state. Some of these sections had been homesteaded, some were within the boundaries of Indian reservations, and yet others had been otherwise disposed of before passage of the Enabling Act. To make up for this loss, and in lieu thereof, other lands were selected by the State of Montana. The Enabling Act and subsequent acts also granted acreage for other educational and state institutions, in addition to the common schools.

• **Distribution of Revenues:**

Each section of state trust land is assigned to a specific trust with distribution of revenue being handled in accordance to criteria outlined for that trust. The three types of trusts in the State of Montana are as follows:

1. **Common School Trust:**

The distribution of revenue generated from common school trust land is distributed yearly to the state Guarantee Account for use by the public schools of the state.

2. **Trusts Other Than the Common School Trust:**

Revenue generated from of the remaining distributable receipts goes directly to the trust recipient. Included in "other" trusts are:

- The University of Montana

- Montana State University - Morrill Grant
- Montana State University - Second Grant
- Montana Tech of The University of Montana
- State Normal School (Montana State University-Billings and Western Montana College of The University of Montana)
- School for the Deaf and Blind
- State Reform School (Pine Hills)
- Veterans Home

3. Public Buildings:

Distribution of revenues on public buildings trust land goes to the Department of Administration.

• **Trust Land Management / Distribution of revenue:**

The lands involved in this proposed project are held by the State of Montana in trust for the support of specific beneficiary as described above (Enabling Act of February 22, 1889; 1972 Montana Constitution, Article X, Section 11). The lands included in this proposal are part of the Common School Trust. The Board of Land Commissioners and the DNRC are required by law to administer these trust lands to produce the largest measures of reasonable and legitimate return over the long run for these beneficiary institutions (Section 77-1-202, MCA). On May 30th, 1996, the Department released the "Record of Decision" on the State Forest Lands Management Plan (SFLMP). The Board of Land Commissioners approved the SFLMP's implementation on June 17, 1996. The SFLMP outlines DNRC's philosophy for management of state forested Trust Lands.

The Department shall manage lands involved in the project according to the philosophy in SFLMP, which states the following:

Our premise is that the best way to produce long-term income for the trust is to manage intensively for the healthy and biologically diverse forest. Our understanding is that a diverse forest is a dynamic forest that will produce the most reliable and highest long-term revenue stream. In the foreseeable future, timber management will continue to be the DNRC's primary source of revenue and primary tool for achieving biodiversity objectives.¹

• **Goals and Objectives:**

In order to meet the goals of the management philosophy adopted through programmatic review in the SFLMP, the Department has set the following specific project objectives:

- *Improve forest health and vigor while maintaining shade-intolerant ponderosa pine on the landscape.*
- *Opportunity to generate revenue for the State Trust.*

1. IMPROVE FOREST HEALTH AND VIGOR WHILE MAINTAINING SHADE-INTOLERANT PONDEROSA PINE ON THE LANDSCAPE:

GENERAL INFORMATION:

A formative process in the development of forest stands is disturbance that kills trees, making way for new ones. The characteristics of these stands are determined by the kind, frequency, and magnitude of disturbance that have affected the site in the past. Climax communities are a result of a long series of small light disturbances, while seral/pioneer stages are the product of intensive, sometimes stand replacing events. Fire in the past has played a significant role in the natural disturbance of many forest tree-species. They have developed adaptations to fire such as closed-

¹ "State Forest Land Management Plan, Final Environmental Impact Statement, Record of Decision", Montana Department Of Natural Resources And Conservation, May 30, 1996, p. ROD-1, ROD-2.

cones, hard-coated seeds that are capable of surviving for long periods on the forest floor, and light-seeded species that thrive on seedbeds of bare mineral soil exposed by fire.

Tree species that are true pioneers form all or part of the main canopy almost from the time of their establishment. Those that are rather tolerant to shade are likely to become established simultaneously and remain underneath until the death of the pioneers.²

The successional aspects of ponderosa pine can be expressed in terms of its successional role, which may range from pioneer to climax, depending on site condition. On more favorable sites ponderosa pine encounters severe competition with other tree species and must establish opportunistically when disturbance reduces competition and creates a seedbed. In conditions such as this, ponderosa pine is usually seral to Douglas-fir.³ Ponderosa pine has sufficient fire-resistant bark to withstand burning at intervals throughout most of its life cycle and thrives only as a result of periodic fires. Occasional surface fires have been beneficial to the maintenance of this species in original forest because they arrested natural succession, exposed favorable seedbeds, and prevented more destructive fires. Regeneration of Douglas-fir after fire comes from seeds already present on remnant trees or from those subsequently produced by trees that happen to survive because of their size or location.⁴

CURRENT STAND CONDITION:

The proposed harvest area consists of a stratified mixture of ponderosa pine and Douglas-fir in various stages of development from seedling/sapling and pole classes to maturity.

Ponderosa pine seedlings/saplings continue to encroach on grass openings and other areas of natural disturbance. Full sunlight reaching the ground has created favorable growing conditions, resulting in a stand that is overstocked.

Ponderosa pine dominates the pole-size diameter class and is well-stocked. Overcrowding in this stand could result in keen competition for the available water, light, and soil nutrients. Live-crown development could slow as the overstory canopy continues to close-in on itself.

The most apparent stratified mixture of tree species in this area are in stands of mature ponderosa pine and Douglas-fir. Although these stands are dominated by ponderosa pine, a component of Douglas-fir, which has penetrated to the top of the main canopy, can be found as well. Mixed stands develop most often when a tree species having the most rapid rate of juvenile growth in height outgains the slower growing species, which lag even further behind due to lack of sunlight. If the slower growing species are not sufficiently tolerant to shade and competition, only random individuals would occupy the main canopy and a nearly pure stand of faster growing species would remain. However, if the slower growing species were sufficiently tolerant to shade, they would persist as a lower story beneath the main canopy.⁵

The description of mixed stand development explains how shade tolerance plays a role in the establishment of different tree species at relatively the same point in time, say after a catastrophic event such as a stand replacing wildfire. The fact that both shade intolerant ponderosa pine and shade intermediate Douglas-fir occupy the main canopy may be the result of a near stand replacing wildfire event that killed a large portion of the original stand but left a few scattered Douglas-fir throughout. Exposed soil conditions that come about as a result, would have provided conditions favorable to the regeneration of pine underneath the fir.

² Smith, David M., *"The Practice of Silviculture"*, Seventh Edition, published by John Wiley & Sons, 1962, p.535

³ Baumgartner, David M., *"Ponderosa Pine The Species And Its Management"*, Symposium Proceedings, September 29- October 1, 1987, Spokane, Washington, USA, p. 73

⁴ Smith, David M., *"The Practice of Silviculture"*, Seventh Edition, published by John Wiley & Sons, 1962, p. 327, 328

⁵ Smith, David M., *"The Practice of Silviculture"*, Seventh Edition, published by John Wiley & Sons, 1962, p.533

Openings in the canopy have produced gaps that are stocked with poor-quality Douglas-fir seedlings and saplings. With current trends toward aggressive wildfire suppression the composition of this stand could shift more readily towards Douglas-fir in lieu of major natural disturbances due to this species intermediate tolerance to shade.

SILVICULTURAL PRESCRIPTION:

Varying even-aged silvicultural systems would be employed on the proposed harvest unit to mimic the occasional low-intensity surface fires that are beneficial to the maintenance of ponderosa pine. Whenever possible, Douglas-fir would be removed from the site in an attempt to maintain healthy and vigorously growing ponderosa pine on the landscape.

Seedlings/Saplings:

A pre-commercial "release" cutting would be applied to seedling/sapling sized trees four-inch in diameter or less. It is intended to release desirable trees from competition, reducing the overall density of the stand, and give the young remaining trees more room to grow. Implementation of this pre-commercial release cutting would be an added cost to the logging contractor, most likely being reflected in the bid stumpage price. Added stand benefits such as increased usable wood products in the future, decreased susceptibility to insects and disease attacks, and increased forage production would outweigh the initial cost investment.

Pre-commercial release cut is most beneficial and cost-effective early in stand development, when trees are 10 to 20 feet in height and 2 to 4 inches in diameter. At this stage, they're relatively easy and inexpensive to cut, the slash load is low, and the trees left respond quickly with increased growth.

Shade-intolerant species such as ponderosa pine need wider spacing for maximum growth. In addition, droughty conditions that are typical of pine sites warrant wider spacing as well. Spacing for optimal wood production in trees of this size, diameter, and species would be approximately 13' x 13'. Meeting this spacing objective would leave about 260 trees per acre, more than enough to prevent ingrowth and sunscald. This spacing would also provide adequate distance between residual trees to allow for the use of a mechanical system. This would reduce cost compared to conventional hand methods, increase productivity, and add more acres to the project

Residual tree selection would be based on the following criteria:

1. Are in a dominant or codominant position
2. Have at least 30 percent of their total height in crown
3. Have small branches, straight boles, and little taper
4. Lack broken, forked, or damaged tops
5. Have few or no disease problems

In addition trees that are suppressed, poorly formed, sickly, dominant heavy-limbed "wolf" trees, or those competing with selected leave trees would also be removed.⁶

Pole-Sized Stands:

By definition pole-sized stands are groups of young, relatively even-aged trees that are between 4" and 8" in diameter at breast height.⁷ In addition, stand densities are usually very high resulting in a "closed canopy". This leaves minimal growing space for further crown development in the canopy of dominant and codominant trees. Subordinate trees have lost crown surface and are no longer capable of adequately responding to release.

⁶ Emmingham, W.H., Oester, P.T., "Using Precommercial Thinning To Enhance Woodland Productivity", Oregon State University Extension Service, April 1997, Available on line at: <http://eesc.orst.edu/agcomwebfile/edmat/html/EC/EC1189/EC1189.html>

⁷ Wickman, Allen, "The Forest Management Digest", 6th Edition, Minnesota Forestry Association, p.438

An even-aged silvicultural system that would remove trees from the middle and upper portions of the crown and diameter range would be applied in this stand. "Crown thinning" would modify and guide development in dominant and co-dominant trees, allow for the expansion of crowns and root systems, and increase the overall health and vigor of this stand.

In crown thinning, trees would be removed from the upper crown classes in order to open up the canopy to favor the development of the most promising trees of the same class. Most of the trees that would be cut are from the codominant class, but any intermediate or dominant tree that is interfering with the development of a potential crop tree would also be removed. Trees to be favored would be chosen (if possible) from dominants and when necessary, from codominants.⁸

The question of whether individual dominant or codominant tree are favored would be settled according to the relative potential of adjacent trees. If the choice lies between a promising codominant and mediocre dominant, the codominant would be favored. A situation of this kind occurs most often where the codominant has a straighter, smoother bole, and smaller branches than the dominant. Where all trees are of good health, form, and species, codominants interfering with the growth of dominants would be removed, on the premise that position in the crown canopy is the best index of past and future vigor.

Theoretically, overtopped and intermediate trees that do not interfere with the crop trees are not cut in crown thinning. In practice however, there is little reason to leave such trees if they can be harvested profitably and their continued presence adds value neither to themselves nor to the stand as a whole.⁹

Crown thinning would be applied to the upper crown classes uniformly throughout this stand. It would provide a generous, but not unlimited number of the most promising crop trees a chance of being released.

It would not be practicable however, to free the crowns of the crop trees on all four sides, as this would seriously reduce the stocking in these stands. Therefore, if large holes are inevitable, the strongest competitors of the crop trees would be cut and the rest left to be taken out in subsequent thinnings.¹⁰ Basal area objectives of between 60 ft² and 80 ft² per acre would most likely provide stand conditions that meet this objective.

Mature Stands:

A seed-tree silvicultural method would be carried out in this stand, removing a good portion of the trees in one cutting, while retaining a small number (15 ft² to 25 ft² basal area/acre) throughout to provide seed. This even-aged regeneration method would be most favorable for the development of ponderosa pine, which requires sufficient sunlight to grow. Douglas-fir would be a primary target for removal when practicable, to reduce competition and slow the natural succession.

To maximize natural regeneration, the germination of seed as well as early seedling survival depends primarily on adequate site preparation to scarify and expose bare mineral soil. Mechanical harvesting equipment operating during the summer would create more than enough soil disturbance to provide for adequate pine regeneration. In addition, Douglas-fir regeneration that has become established as a result of small openings in the canopy would be eliminated through the use of a mechanical slash-busting system. This aggressive approach would effectively eliminate Douglas-fir in these areas, scarifying the soil in the process.

INDICATOR:

Indicators of increased growth and yield can be obtained through monitoring the radial growth by measuring the width of the last ten rings from increment borings.

⁸ Smith, David M., "The Practice of Silviculture", Seventh Edition, published by John Wiley & Sons, 1962, p. 70

⁹ Smith, David M., "The Practice of Silviculture", Seventh Edition, published by John Wiley & Sons, 1962, p. 71, p. 72

¹⁰ Smith, David M., "The Practice of Silviculture", Seventh Edition, published by John Wiley & Sons, 1962, p. 76

2. OPPORTUNITY TO GENERATE REVENUE FOR THE STATE TRUST.

Harvesting approximately 1400 MBF of Douglas-fir and Ponderosa Pine sawtimber would generate a net positive return to the State Trust.

INDICATOR:

Stumpage receipts to the DNRC in dollars.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

1.1 HISTORY OF PLANNING PROCESS:

A scoping letter was sent out January 12, 2006 to interested parties on the DNRC, Helena Unit "Timber Sale Scoping List". The "Initial Proposal" letter briefly outlined project needs and objectives as well as existing landscape conditions.

Adjacent landowners also received the same scoping letter. They were identified using GIS Metadata obtained through the Montana Cadastral Mapping Project. This public-private sector partnership creates, maintains, and disseminates a digital GIS land ownership (cadastral) map database of the entire state. In addition, current land-use information on State Trust property was obtained from the DNRC Trust Lands Management System.

A legal notice was published in the *Great Falls Tribune* on January 20th, January 27th, and February 3rd 2006. Comments were to be directed to the DNRC Helena Unit office by February 15, 2006.

1.2 ISSUES STUDIED IN DETAIL:

The DNRC received a written comment from Cory Loecker, Wildlife Biologist, Montana Fish Wildlife and Parks. Concerns focused on big game habitat, access routes, and Species of Special Concern and are on file at the DNRC, Helena Unit Office.¹¹

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

2.1 SMOKE MONITORING UNIT:

In 1978, federal, state, local government agencies, and the forest products industry formed the Montana State Airshed Group. Their purpose was to manage and limit the impacts of smoke generated from necessary prescribed burning. In 1990, agencies and companies in North Idaho joined the Montana group on an operational basis to accomplish the same purposes. Agencies and companies from southern Idaho joined the group in 1999.

¹¹ Letter, Cory Loecker, Wildlife Biologist, Montana Fish Wildlife and Parks, February 6, 2006

Accumulation of smoke from controlled burning is limited through scientific monitoring of weather conditions and formal coordination of burns. Members submit a list of planned burns to the Monitoring Unit in Missoula, Montana. For each planned burn, information is provided describing the type of burn to be conducted, the number of acres, as well as the location and elevation at each site. Burns are reported by "Airshed", which are geographical areas with similar topography and weather patterns. The program coordinator and a meteorologist provide timely restriction messages for airsheds with planned burning.¹²

Slash generated from the timber harvest would be piled, burned, trampled and/or scattered to reduce wildfire risk, adhering to state standards, which are as follows:

"General Standard" as defined by Administrative Rule-36.11.222, Number 4, which states: "Slash must be reduced such that a fire starting under conditions similar to a standard day, as defined by the department's HRA Manual, would burn with a flame length of four feet or less, as calculated by the fire science BEHAVE model, or other fire behavior model selected by the department".

Slash that accumulates in excess to the nutrient cycling and course woody debris requirements would be piled and burned and burned at the landing area by the DNRC, Helena Unit Fire Crew after submitting a request and receiving approval to burn from the Smoke Monitoring Unit.

2.2 TEMPORARY RIGHT-OF-WAY DEED / FOREST SERVICE COMMERCIAL ROAD USE PERMIT:

2.2.1 TEMPORARY RIGHT-OF-WAY DEED:

There is no legal public access to State Trust lands in Section 16, Township 16 North, Range 6 East. As a result, the adjacent private landowner has granted a Temporary-Right-Of-Way Deed to the DNRC. This deed not only permits use of a forwarder trail (9,293' x 20') but a log decking and truck loading area that is 0.5 acres in size. Termination of this deed is October 15, 2008 or when the proposed timber sale is completed, which ever comes first.

2.2.2 FOREST SERVICE COMMERCIAL ROAD USE PERMIT:

Logging Creek Road (F.S. Road 67) would be used for approximately 6.72 miles and is maintained by the Lewis & Clark National Forest. The logging contractor would be responsible for obtaining proper Forest Service permits and paying any associated fees or bonds. Costs would most likely be based on the amount of rough forest product being transported over this road and is currently estimated at \$11.50/MBF.

3. ALTERNATIVES CONSIDERED:

3.1 INTRODUCTION:

Alternatives including the proposed action are the heart of this "Checklist Environmental Assessment". The purpose of this section is to describe the alternatives, comparing them in terms of environmental impacts and achieved objectives. Alternatives were determined through scoping, identifying the issues of concern, input from Interdisciplinary Team (IDT) specialists, and guidance from resource management standards set forth in the "SFLMP" and "Administrative Rules"¹³.

3.2 DESCRIPTION OF ALTERNATIVES:

¹² "Smoke Monitoring Unit", Montana/Idaho State Airshed Group. Available at: <http://www.smokemu.org>

¹³ DNRC, *Administrative Rules of Montana [ARM] 36.11.401 through 450*, DNRC Trust Land Management Division, Forest Management Bureau. Missoula, Montana. 2003, 87p.

This section describes the activities of the No Action Alternative and all other Action Alternatives.

3.2.1 ALTERNATIVE A: DEFERRED HARVEST (NO ACTION)

3.2.1.1 PRINCIPLE ACTIONS: ALTERNATIVE A

Timber harvesting would be deferred until a later entry. However, ongoing State Trust Land permitted, licensed, and approved activities would continue as follows:

- **Livestock Grazing** - existing Forest Grazing License #3072748 would continue in the project area contributing \$373.20 (60 AUM's x \$6.22) annually to the State Trust.
- **Fire Suppression** - human and natural caused fires would be suppressed by volunteer fire departments, and other government agencies.
- **Hunting** - deer, elk, bear, other big game hunting, as well as upland game bird hunting would continue according to the rules and regulations set forth by Montana Department of Fish, Wildlife & Parks. Beginning in 2004, purchase of a conservation license will also authorize use of accessible trust lands for hunting and fishing.
- **Public Vehicle Access** - existing motorized access privileges, as well as limitations, would remain the same. Currently this section is not accessible to unauthorized motorized use, as existing roads are either obstructed or gated.
- **Hiking and Other Recreational Uses** - persons having a valid State Trust Land Recreational Use Permit are welcome to hike, pick chokecherries, or perform other outdoor activities on this acreage.

3.2.1.2 PRESENT RELEVANT ACTION NOT PART OF THE PROPOSED ACTION:

Current land uses as described above would continue on property owned by the State of Montana. Timber harvesting on adjacent lands would most likely continue, as they are actively involved in forest management. No current timber management activity is taking place on BLM or U.S. Forest Service lands close to the project area.

3.2.1.3 REASONABLY FORESEEABLE RELEVANT ACTIONS NOT PART OF THE PROPOSED PROJECT:

U.S. Forest Service, BLM, and Private ownership would undoubtedly experience timber-harvesting activities during the next several decades.

3.2.2 ALTERNATIVE B: CROWN BUTTE TIMBER HARVEST:

3.2.2.1 PRINCIPLE ACTIONS: ALTERNATIVE B

If Alternative B were selected for implementation, the following actions would occur:

- The proposed harvest would cut approximately 1400 MBF of Douglas-fir and Ponderosa Pine sawtimber, generating a net positive return to the State Trust. Logging methods used would be ground based equipment due to gentle slope grades within the proposed harvest unit.

- The following even-aged silvicultural systems would be employed to maintain shade intolerant ponderosa pine on the landscape:
 - Pre-commercial release cuttings
 - Intermediate crown thinning
 - Seed-tree harvest
- Douglas-fir would be a primary target for removal when practicable, to reduce competition and slow the natural succession.
- Mechanical "slash busting" equipment would be used to thin seedling/sapling stands, improving health and vigor as well as increasing future growth potential. This would reduce cost compared to conventional hand methods, increase productivity, and add more acres to the project.
- Rough forest products would be transported a distance of approximately 1.76 miles on mostly existing trail to a small landing area next to Logging Creek Road. A rubber tired forwarder would be used for this purpose, minimizing impacts to the landscape.
- Contractor would be required to obtain a Commercial Road Use Permit from the Lewis & Clark National Forest for use of approximately 6 miles of Forest Service road.
- Post-harvest weed management would consist of monitoring for noxious weeds for a minimum of five years following timber harvesting. Spot weed spraying would then be done if necessary. Prior to coming into the project area, harvesting equipment would be required to be clean of noxious and nuisance weeds.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

4.1 SOILS – EXISTING CONDITIONS:

The proposed project area is located on mountain footslopes and uplands with gentle to moderately steep stony loams and silty clay loams formed in alluvium and in material weathered from limestone. Most of the proposed harvest area is located on Whitore soils. These soils are silty clay loams that occur on moderate to moderately steep foot slopes and uplands. Erosion hazard on slopes up to 30% is low, and moderate for slopes 30-40%.

Most of the nonforested areas and sites undergoing forest encroachment within the proposed harvest area are located on Hanson-Sheege soils. These soil types consists of deep well-drained soils formed in alluvium and occupying alluvial fans and foot slopes at elevations between 4,500 and 5,500 feet. Erosion hazards are low to moderate for these soils.

The landscape surrounding the proposed harvest area also includes numerous limestone rock

outcrops and ledges. These areas occur on steeper slopes ranging from 35 to 75% and present higher erosion risk. No harvest activities are planned in these areas.

Timber harvest can affect soil productivity through displacement, erosion and compaction of the most productive surface layers of soil. This occurs largely through the use of ground based harvesting and skidding equipment, which can cause low to high levels of soil disturbance. However, existing detrimental soil effects within the proposed project area are limited to localized areas of heavy livestock concentration due to watering or salting. Soils at these sites have been compacted due to livestock trampling. These sites occupy a negligible amount of the project area (estimated at less than 0.1%) and are not resulting in substantial levels of soil impact. No other sites with observable levels of soil erosion, displacement or compaction were noted during the field review. Detrimental soil effects from historic timber harvest and/or other land management activities within the project area are either limited in extent or degree, or not apparent due to natural recovery over time. No areas of marginal slope stability or mass wasting were identified within the proposed project area.

4.2 IMPLEMENTATION OF ACTION ALTERNATIVE - IMPACTS TO SOILS:

Under the proposed action alternative soil impacts (erosion, compaction and displacement) would be minimized by implementing BMP's and the following recommended mitigation measures: including limiting the slope range of tractor operations, limiting season of use, and minimizing ground disturbance to levels needed for silvicultural prescriptions.

Surface drainage on the existing forwarder trail would be added to reduce erosion risk from that presently occurring. All harvest activities would comply with BMP's. Based on these mitigation measures the risk of substantial levels of impact occurring to soils within the project area is expected to be low (see Water Quality section for more discussion of erosion risk and mitigation measures). Results of monitoring of comparable DNRC harvest sites show that the level of total soil impacts due to compaction, displacement and erosion ranged from 5.6 to 10% of harvest area (DNRC 2004). Detrimental soil impacts are considered substantive when they exceed 20 percent of a harvest area (DNRC 1996).

4.3 RECOMMENDED SOIL MITIGATION MEASURES:

- * Limit equipment operations to periods when soils are relatively dry, (less than 20%) frozen or snow covered to minimize soil compaction and rutting, and maintain drainage features. Check soil moisture conditions prior to equipment start-up. Some moisture conditions are accepted on harvest units where tractors remain on designated trails and timber will be winched to trails.
- * Develop and implement a general skidding plan prior to equipment operations. Designated skid trails may be required on complex terrain and ephemeral draw crossings. Tractor skidding will be limited to slopes 40% or less.
- * Mark and maintain equipment restriction zones (ERZs) on localized moist sites, draws and short steep slopes within harvest units.
- * Slash Disposal- Limit scarification to 30% of units where regeneration desired. Avoid tractor piling on wet sites or slopes over 35%. Retain 5-10 tons/acre large woody debris for nutrient cycling and long-term soil productivity.¹⁴

¹⁴ D. Spanjer and G. Frank, "Soils, Watershed and Fisheries Report Crown Butte Timber Sale E.A." Resource Management Bureau, Montana DNRC, April 18, 2006, p.8

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

5.1 WATERSHEDS - AFFECTED ENVIRONMENT:

The proposed timber sale involves a single parcel of State ownership (Section 16, T16N, R6E) located within the Dick's Gulch watershed and the watershed of an unnamed tributary to Belt Creek. These watersheds drain a combined area of approximately 2093 acres. The proposed harvest units are actually drained by several ephemeral draws that are tributary to both Dick's Gulch and the unnamed tributary of Belt Creek. All drainage features within the proposed harvest area are ephemeral draws with no defined stream channels. Belt Creek is located approximately 0.75 miles down slope of the proposed project area.

The road access to the proposed sale area will utilize an existing State highway, and existing Cascade County and U.S. Forest Service road systems. The harvested logs will be forwarded approximately 1.75 miles from the harvest area to a landing located on private property just off a Forest Service road. The forwarder route will utilize approximately 1.54 miles of existing trail on State land, 1.75 miles of existing trail on Private land, and require 0.75 miles of new trail construction on private land. The forwarder trail construction is proposed in order to connect the existing trail on state land to the existing trail located on private property. The new forward trail construction is located in the unnamed tributary to Belt Creek. The existing forwarder trail on private land is partially located in the Belt Creek watershed and Logging Creek watershed. The proposed forwarder trail construction will require installation of 2 temporary crossing on moderately deep and well-defined ephemeral draws.

The Belt Creek Drainage, which includes Dick's Gulch and the unnamed tributary, is classified B-1 in the Montana Surface Water Quality Standards. The B-1 classification is for multiple use waters suitable for domestic use after conventional treatment, growth and propagation of cold-water fisheries, associated aquatic life and wildlife, and agricultural and industrial uses. Among other criteria for B-1 waters, no increases are allowed above naturally occurring concentration of sediment, which will harm or prove detrimental to fish or wildlife. Naturally occurring includes conditions or materials present from runoff on developed land where all reasonable land, soil and water conservation practices have been applied. Reasonable practices include methods, measures or practices that protect present and reasonably anticipated beneficial uses. The State has adopted Forestry Best Management Practices through its Nonpoint Source Management Plan as the principle means of controlling nonpoint source pollution from silvicultural activities.

Existing beneficial uses in Dick's Gulch immediately downstream of proposed harvest area include water rights for recreation, agriculture and industrial uses. Other sensitive downstream beneficial uses in Belt Creek include aquatic life support, cold-water fisheries and drinking water supply.

Neither Dick's Gulch nor the unnamed tributary to Belt Creek are listed as a water quality limited waterbodies on the 1996 or 2004 versions of Montana's 303(d) list (MTDEQ 1996, 2004). However, Belt Creek, directly downstream of the project area, is listed as a water quality limited waterbody in the 1996 and 2004 versions of Montana's 303(d) list. The 303(d) list are compiled by the Montana Department of Environmental Quality (MTDEQ) as required by the Montana Water Quality Act (MCA 75-5-701 through 705) and Section 303(d) of the Federal Clean Water Act, and the Environment Protection Agency (EPA) Water Quality Planning and Management Regulations (40 CFR, Part 130). Under these laws, the State is required to identify water bodies that do not fully meet water quality standards; or where beneficial uses are threatened or impaired.

State and Federal laws also require that these listed water bodies be targeted for Total Maximum Daily Load (TMDL) development. The TMDL process is used to determine the total allowable amount of pollutants in a water body. Each contributing source is allocated a portion of the allowable limit. These allocations are designed to achieve water quality standards or to fully support all beneficial uses. A TMDL has been scheduled but still remains to be completed. Under Montana Law (MCA 75-5-703(10)(c)), new or expanded nonpoint source activities affecting a listed water body may commence and continue provided they are conducted in accordance with reasonable land, soil and water conservation practices.

5.2 WATER QUALITY - EXISTING CONDITIONS:

Road construction, agriculture, livestock grazing historic placer mining, wildfire and fire suppression activities have all occurred in the affected watersheds throughout the recent or historical past. Existing direct, indirect and cumulative impacts to water quality and associated beneficial uses appear to be primarily related to agriculture and livestock grazing in the Belt Creek watershed. Presently, there are no known direct, indirect and cumulative impacts to water quality in the Dick's Gulch or the unnamed tributary to Belt Creek. Belt Creek is considered an impaired stream because its agricultural and industrial beneficial uses have been determined by DEQ to only be partially supported (MTDEQ 2004). The probable causes of this impairment have been identified as bank erosion and siltation. The probable sources of impairment have been identified as agriculture, crop and grazing related sources (MT DEQ 2004). It is unlikely that Dick's Gulch or the unnamed tributary draining the DNRC project area are contributing to downstream water quality impacts in Belt Creek. Both watersheds are drained by are ephemeral draw features that rarely convey concentrated surface runoff or rarely have direct discharge to Belt Creek.

A coarse filter approach was used to determine existing conditions and to evaluate the potential for cumulative watershed impacts due to increases in water yield. Recent aerial photographs were utilized to estimate the percentage of drainage area forested and the extent of the existing timber harvests in each watershed analysis area. The analysis also included field evaluations conducted to: 1) Determine the existing stream channel and riparian conditions, 2) identify potential in-channel sources of sediment, and 3) verify harvest information obtained from air photos.

The results of the coarse filter analysis indicate there is a low risk of detrimental increases in water yield, or magnitude and duration of peak flows due to existing timber harvest and road construction in both the Dick's Gulch and unnamed tributary drainage. Existing cumulative watershed effects are unlikely in the watershed of Dick's Gulch and unnamed tributary due to the following reasons: 1) The project area is located in a landscape that receives relative low levels of precipitation and subsequent runoff. 2) Little if any of the forested area has been harvested in the recent past. 3) Dick's Gulch and the unnamed tributary are ephemeral draws with very little evidence of flow except during large runoff events 4) Field inventories of stream channel conditions on State land in the watershed determined that there was no evidence of channel instability due to increases in the magnitude or duration of peak flows.

Detailed stream and drainage feature inventories and sediment source surveys were completed within the project area and on the State section by a DNRC hydrologist. The purpose of these surveys was to identify and inventory all existing and potential sources of channel instability, erosion and sediment delivery to streams occurring on State land. The stability of the ephemeral draw bottoms in Dick's Gulch and the unnamed tributary were classified as stable. No substantial sources of fine sediment delivery were identified within the State section. No road sources or upland sources of direct sediment delivery or areas with high potential risk of deliver were noted within the proposed project area. Portions of the existing trail on private land contain segments of sustained steep grades (15-30%) that are located within the bottom of a broad draw-swale feature. However, no evidence of recent erosion or historic severe erosion was noted at these sites.

5.3 FISHERIES - EXISTING CONDITIONS:

Both Dick's Gulch and the unnamed tributary do not support fisheries. The Montana Department of Fish, Wildlife and Parks completed fisheries surveys in Belt Creek during 2001(MFISH 2006). These surveys determined the presence of native species such as goldeye, mottled sculpin, mountain whitefish, and westslope cutthroat trout as well as non-native species such as brook trout, brown trout, rainbow trout and carp. Belt Creek is located approximately 0.75 miles down slope of the proposed project area.

5.4 IMPLEMENTATION OF ACTION ALTERNATIVE:

5.4.1 Water Quantity (Water Yield):

A coarse filter approach was used to evaluate the potential for cumulative watershed impacts due to increased water yield, or magnitude and duration of peak flows resulting from the proposed action. Additional information collected during field surveys were also integrated into this analysis. Cumulative impacts due to water yield increases in Dick's Gulch and unnamed tributary are not anticipated to result from the actions proposed under the action alternative.

The levels of potential increase in offsite water yield resulting from the proposed harvest and temporary forwarder trail construction are expected to be negligible. This is due to the low levels existing harvest, physiographic location of the proposed harvest stands, harvest stand composition and structure, and the relatively dry nature of the state section.

The affected watersheds receive relatively low amounts of precipitation and subsequently produces relatively low amounts of runoff per unit area.

The forested areas on the State section primarily consist of relatively dry ponderosa pine and Douglas fir cover types. These cover types were subject to frequent low intensity wildfire events prior to modern day settlement. Decades of fire suppression have resulted in higher stand stocking levels (density of trees), higher overall basal area and an increase in the total amount of forested area due to range encroachment than would be expected under natural conditions.

The harvest prescription includes mostly pre-commercial, commercial thinning and seed tree harvest that will result in a considerable amount of basal area and canopy cover within the residual stand. The amount of total forest area and stocking following harvest is expected to be similar to natural conditions.

There is low risk of detrimental impacts due to cumulative watershed effects associated with increased water yield, or magnitude and duration of peak flows resulting from the proposed action alternative.

5.4.2 WATER QUALITY:

Land management activities such as forwarder trail construction, installation of temporary draw crossing, road maintenance and use, and timber harvest can potentially increase levels of fine sediment delivery to streams if not properly located, designed, maintained and mitigated. The primary risks to water quality that are associated with the proposed timber sale are roads and constructed trails, especially when located along or crossing stream and/or ephemeral draws. Risk of erosion and sediment delivery are highest when roads are located in areas with inadequate buffering between streams and other drainage features, on erosive soils, or on steep and/or unstable slopes. A lack of periodic maintenance, inadequate surface drainage features, and use during wet periods or conditions may also contribute to higher risk.

All existing roads and trails, and the proposed forwarder and skid trail locations within the timber sale area have been reviewed in the field by a DNRC hydrologist. The existing road/trail and proposed trail locations were evaluated to determine both existing and potential risk of erosion and sources of sediment delivery to streams. There are no stream crossings within the proposed project area. The existing road and forwarder trail are located on soils with low to moderate risk of

erosion and there is very low risk of actual sediment delivery to Dick's Gulch, the unnamed tributary, Belt Creek and Logging Creek.

Portions of the existing trail contain segments of sustained steep grades (15-30%) that are located within the bottom of a broad draw-swale feature. While no evidence of recent erosion or historic severe erosion was noted, these segments of trail are more susceptible to erosion during and following forwarder use. Additional surface drainage features will be added to reduce the risk of erosion. Regardless of these risks, this segment of road is well-buffered from Logging Creek and there is very little risk of sediment delivery occurring from this segment of road. There is a series of large pastures located between this site and the stream.

The proposed segment of forwarder trail construction includes two temporary ephemeral draw crossings. These crossing will be constructed using temporary installations of polyethylene pipe. After the proposed use, the pipes and fill material would be removed from the drainage features. The forwarder trail including the crossing sites would be stabilized and re-vegetated after use.

Application of BMPs, site-specific design and mitigation measures are expected to reduce erosion and potential sediment delivery associated with the proposed temporary forwarder trail construction to an acceptable level as defined under the Montana Water Quality Standards. Acceptable levels are defined as those conditions occurring where all reasonable land, soil, and water conservation practices have been applied. The risk of even short-term sediment delivery resulting from construction and use of the forwarder trail and all other harvest activities trails is very low. No impacts to water quality and downstream beneficial uses in Dick's Gulch, unnamed tributary, Belt Creek and Logging Creek are anticipated.

Approximately 1.75 miles of existing jeep trail would be utilized and improved to standard that complies with minimum BMPs. These improvements are expected to result in reduced risk of erosion and decreased potential for sediment delivery when compared to current conditions.

All proposed harvest areas have also been reviewed and evaluated in the field by a DNRC hydrologist. Selection of appropriate harvest and yarding systems, operating seasons, limiting equipment operations to suitable slopes or designated trails and appropriate ground conditions, and implementation of appropriate BMPs and mitigation measures will be used to reduce the risk and severity of soil erosion and potential sediment delivery to streams and ephemeral drainage features.

Equipment restriction zones will be designed to effectively buffer draws and other ephemeral drainage features from harvest and skidding activities. Skid trails may utilize designated crossing of several ephemeral draws and swales located within and between harvest units. These crossings will be spaced 200 to 300 feet apart and use would be restricted to use during dry conditions. Any ground disturbance within the draw bottoms would be stabilized and grass seeded. No sediment delivery to streams is expected to result from timber harvest and skidding operations.

5.4.3 FISHERIES:

No direct, indirect or cumulative impacts to fish populations or fish habitat are expected to result from the proposed action alternative. There are no streams supporting fish located within the immediate project area. The risk of impacts to down slope fish populations and habitat in Belt Creek is low due to the lack of direct delivery of concentrated surface flow from the proposed harvest areas to streams supporting fish. Activities carried out in ephemeral drainage features will utilize BMPs, equipment restriction zones, and designated draw crossings to prevent excessive levels of soil disturbance. Therefore, even ephemeral delivery of sediment is not expected to occur down slope of the proposed harvest activities (see section addressing Water Quality for additional discussion on risk of sediment delivery).¹⁵

¹⁵ D. Spanjer and G. Frank, "Soils, Watershed and Fisheries Report Crown Butte Timber Sale E.A." Resource Management Bureau, Montana DNRC, April 18, 2006, p.8

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

6.1 AIR QUALITY:

Air quality may be affected by burning slash that would accumulate as a result of the implementation of this proposed timber harvest. An ample amount of logging slash would remain on site however to provide for erosion control, nutrient recycling, and coarse woody debris.

6.1.1 MONTANA / IDAHO AIRSHED GROUP:

The DNRC, a member of the Montana / Idaho Airshed Group, is required to:

- Minimize or prevent the accumulation of smoke in Montana to such degree as is necessary to protect state and federal ambient air quality standards when prescribed burning is necessary for the conduct of accepted forest practices such as hazard reduction, regeneration and wildlife habitat improvement. The development of alternative methods shall be encouraged when such methods are practical.¹⁶
- Submit a plan and receive approval to burn the slash that would accumulate as a result of this project.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

7.1 RARE PLANTS AND WEEDS:

Montana Natural Heritage Program was consulted to identify threatened, endangered, or sensitive plant species. No such plant species exist within the proposed harvest area.

7.2 VEGETATIVE COVER TYPE CHANGES:

The overall vegetative community of the surrounding ecosystem should not be adversely impacted due to the relatively small scope of this project.

7.3 VEGETATIVE ANALYSIS:

Montana Natural Resources Information System (NRIS), which is a clearinghouse for GIS databases and provides services to groups or individuals needing access to GIS technology, was used to determine vegetative cover types, timber harvest areas, and ownership.

7.3.1 VEGETATIVE ANALYSIS STUDY AREA:

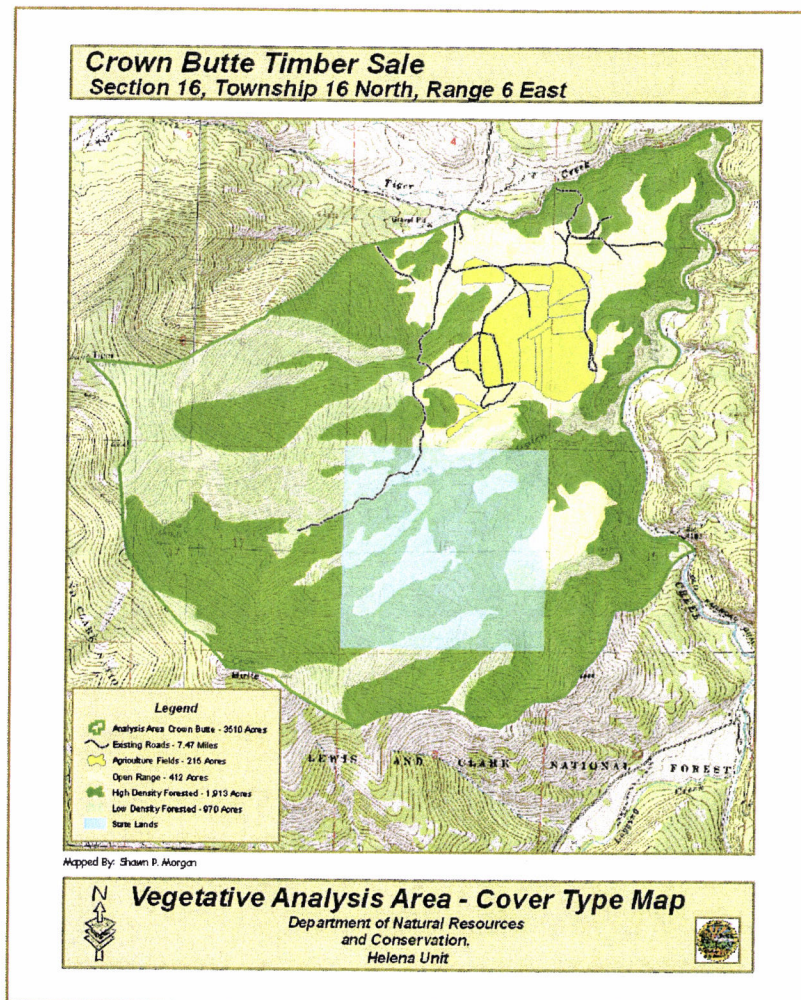
The study area is approximately 3,510 acres and follows the rough description listed below: Starting in the northeast corner where Tiger Creek drainage spills into Belt Creek, travel south along the larger Belt Creek waterway for approximately 3.0 miles then turn southwest and head uphill. Going westerly for this point almost 2.75 miles and staying along the mostly open ridge top, Crown Butte

¹⁶ "Smoke Monitoring Unit", Montana/Idaho State Airshed Group. Available at: <http://www.smokemu.org>

summit can be found. Staying on top of the ridge again and moving northwesterly 1.79 miles through forested ground Tiger Butte is reached. Leaving northeast down a finger-ridge approximately 2.03 miles Evans – Riceville Road is reached. Going mostly east along this graveled road near Tiger Creek for a distance of 1.35 miles you close in on the starting point.

7.3.2 COVER TYPES:

Air photo and topographic map coverage was evaluated in Arc GIS to determine vegetative status in the analysis area. The area was broken into four cover type categories and digitized to determine acres.



Open rangelands encompass nearly 412 acres, or 12% of the study area with native grass being utilized by cattle for grazing. Agricultural fields make up nearly 6% of the land base in the analysis area, or about 215 acres. Forested areas have been broken into either “high-density” or “low-density”. High-density forested land is approximately 1,913 acres or 54% of the study area, while low-density forested land would be close to 970 acres or 28% of the land base.

The 262-acre, Crown Butte Timber Sale would reduce the pole-sized and sawtimber high-density forested acres within the Analysis area by approximately 7.4%. A good portion of the proposed silvicultural methods that are being recommended for the Crown Butte Timber Sale are aimed at reducing overstocked stands to more appropriate basal area levels. The proposed project would not adversely impact, or alter greatly the current vegetative cover types within the analysis area.

7.4 OLD GROWTH:

Information pertaining to old growth was derived from the following source: P. Green, J. Joy, D. Sirucek, A. Zack, B. Naumann, "Old-Growth Forest Types of The Northern Region", USDA Forest Service, Northern Region, April, 1992, 43 p.

7.4.1 OLD GROWTH DEFINITION:

There is no single all-inclusive definition of old growth, as characteristics vary by region, forest type, and local conditions. However, a generic definition of an old growth forest would be an ecosystem that is distinguished by old trees and related structural attributes. It would encompass the later stages of stand development that typically differ from earlier stages in characteristics such as tree age, tree size, number of large trees per acre and basal area. In addition, attributes such as decadence, dead trees, the number of canopy layers and canopy gaps are important but more difficult to describe because of high variability.

7.4.2 OLD GROWTH DETERMINATION FOR PROPOSED PROJECT:

Trees within the proposed Crown Butte Timber Sale area do not meet the minimum age or diameter characteristics for East Side Montana, Old Growth Type Code 4, and therefore has been eliminated from further study.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

8.1 FISH:

The proposed timber harvest would have no adverse effect on fish habitat, as there is no water within the sale area.

8.2 BIRDS:

Large sawlog-class ponderosa pine as well as a few Douglas-fir would remain after the timber harvest to provide nesting trees and for future snag recruitment. Implementation of the proposed alternative would have minimal, if any, effect on avian species.

8.3 ANIMALS:

A variety of animals utilize the diverse habitat of the Belt Creek watershed basin including: deer, black bears, small mammals, mule deer, and elk, among others. No direct or cumulative adverse effects are anticipated from the implementation of the proposed timber sale.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

9.1 ISSUES ELIMINATED FROM FURTHER STUDY:

Montana Natural Heritage Program was contacted to provide threatened, endangered, and sensitive species information for the project area. Westslope Cutthroat Trout as well as Canadian Lynx have been identified as either sensitive or threatened. It is anticipated that harvesting activities would not adversely impact either identified species, as required habitat is not found within the project area.

Threatened, endangered, and sensitive species as outlined in the "Montana Administrative Rules" have been eliminated from further study for the following reasons:

9.1.1 BALD EAGLE:

Some potential transient use may occur but is not anticipated. Adverse impacts to the Bald Eagle or its habitat are not expected.

9.1.2 GRAY WOLF:

Potential transient use by the gray wolf may occur within the proposed timber sale area. If den sites become established within the sale area, "Administrative Rules" and contractual requirements are in place to protect this species.

9.1.3 GRIZZLY BEAR:

The project area is not within Grizzly Bear recovery or occupied zones. Transient use may occur due to the roaming nature of this species and its wide range of habitats requirements. Adverse impacts to this species are not expected.

9.1.4 LYNX:

Suitable Canadian Lynx habitat is not found within the proposed project area. Adverse impacts to this species are not expected.

9.1.5 FLAMMULATED OWL:

This species prefers seral ponderosa pine stands or secondarily Douglas-fir timber types where historical fire regimes occurred on the landscape. Favored stands are usually found on warm, dry slopes with basal areas of 35 to 80 ft.²/acre. Proposed harvest area characteristics at present do not match the favored habitat requirements of the Flammulated Owl. Conflicts to this species are not expected.

9.1.6 BLACK-BACKED WOODPECKER:

As there have been no wildfires or areas of natural mortality of great magnitude within the past few years, adverse impacts to the Black-Backed Woodpeckers are not anticipated.

9.1.7 PILEATED WOODPECKER:

Large diameter ponderosa pine, western larch, and black cottonwood are used for nesting cavities by the Pileated Woodpecker. These species are not presently found in the harvest area, however if nesting sites become established, "Administrative Rules" and contractual requirements are in place to protect this species. Conflicts with this woodpecker are not expected.

9.1.8 FISHER:

Suitable Fisher habitat is not found within the project area.

9.1.9 NORTHERN BOG LEMMING:

The project area contains no suitable Lemming habitat.

9.1.10 PEREGRINE FALCON:

Nest sites or habitat suitable for the Peregrine Falcon are not found within the project area, therefore, negative effects are not expected.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

A search of the statewide cultural resources database and the DNRC's in-house files for the above referenced project areas has been conducted. No cultural resources have been identified within the proposed project area. Because of the degree of slope throughout this parcel, archaeological investigative fieldwork prior to commencement of timber harvest activities is not recommended nor applicable.¹⁷

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

11.1 LOCAL EFFECTS TO AESTHETICS:

The location of the proposed Crown Butte Timber Sale is somewhat isolated, accessed only through private property. Because the scope and nature of this project is somewhat small, long lasting negative visual effect are not expected. The existing landform is rolling with the harvest unit being located at various slope intervals on the mountainside.

The harvest units will be irregular in shape and size and will be approximately 262 acres. Slated for cutting are disease/damaged dominant and codominant as well as suppressed and intermediate Douglas-fir and ponderosa pine. Residual Douglas-fir and ponderosa pine should most likely be large in diameter and at spacing that most resembles an intermediate thin or seed-tree harvest.

¹⁷ Patrick Rennie, "e-mail", Montana DNRC Archaeologist, February 23, 2006, 1p.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

Demands on land, water, air or energy are not expected to increase in intensity as a result of timber harvesting on State Trust Lands.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

13.1 DNRC PLANS/CURRENT PROJECTS:

State tract includes active Forest Grazing License producing 60 AUM's annually. This activity would remain unchanged under both alternatives. Implementation of the action alternative would initiate a noxious weed management program by the DNRC. This spot spraying would concentrate on noxious and nuisance weeds, controlling them before and after timber harvesting.

IV. IMPACTS ON THE HUMAN POPULATION
<ul style="list-style-type: none">• <i>RESOURCES</i> potentially impacted are listed on the form, followed by common issues that would be considered.• Explain <i>POTENTIAL IMPACTS AND MITIGATIONS</i> following each resource heading.• Enter "NONE" If no impacts are identified or the resource is not present.

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

No significant change is expected from the implementation of the project.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

No significant change is expected from the implementation of the project.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

People are currently employed in the wood products industry in this region of Montana. No measurable cumulative impacts are expected on employment from the execution of this alternative action due to the relatively small DNRC timber sale program.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

People are currently paying taxes on monies generated from the wood products industry in this region of Montana. No measurable cumulative impacts are expected on tax revenues from the execution of this alternative action due to the relatively small DNRC timber sale program.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

There should be no measurable cumulative impacts related to demand for government services due to the relatively small DNRC timber sale program, short term impacts to traffic, possible temporary addition of a few people to the area, and the lack of other timber sales on adjacent lands.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

Refer to Section 1: "Type and Purpose of Action", Part-B, "Purpose of Action", of this document for reference to the "State Forest Land Management Plan".

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

20.1 LOCAL EFFECTS TO RECREATIONAL OPPORTUNITIES:

Persons having a valid State Trust Land Recreational Use Permit are welcome to hike or perform other approved outdoor activities. Beginning in 2004, purchase of a conservation license will authorize use of accessible Trust Lands for hunting and fishing. Implementation of the proposed alternative should have minimal effect on recreational opportunities.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

There will be no measurable, cumulative impacts related to population and housing due to the relatively small nature of the DNRC timber sale program. Personnel required to execute this project are currently employed in this region of Montana.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

Not Applicable.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

Not Applicable.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

24.1 ECONOMIC COST/RETURN ASSOCIATED WITH PROJECT:

The action being proposed not only takes into consideration silvicultural and biological characteristics of managing this forested stand, but the economic viability of implementing such a project.

Due to the high cost associated with access agreements, harvesting/forwarder requirements, and timber stand improvements needs, it is anticipated that the financial return to the Common Schools Trust would be approximately:

$$\bullet 1400 \text{ MBF} \times \$80.00 - \$100.00/\text{MBF} = \$112,000.00 \text{ to } \$140,000$$

This estimate is based on current stumpage value and is intended for relative comparison of alternatives. It is not intended to be used as an absolute estimate of return.

24.2 FUTURE MANAGEMENT OPTIONS:

Implementation of this project would increase the managed forest base on State Trust Lands. This would most likely result in the production of a healthier forested stand that would bring in additional revenue to the Trust.

24.3 CURRENT ACTIVITIES:

Grazing of State Trust Lands in this area currently brings in \$373.20 per year. Some revenue percentage from the General Recreational Use License as well as the newly adopted Conservation License may also be attributed to this tract, although this revenue probably is quite small.

No negative, cumulative economic or social effects are anticipated as a result of the proposed action.

EA CHECKLIST PREPARED BY:	NAME:	Shawn P. Morgan	DATE:	04/07/2006
	TITLE:	Helena Unit Forester		

V. FINDING

25. ALTERNATIVE SELECTED:

I have selected the harvest action alternative. Management actions including commercial even aged regeneration harvesting, intermediate thinning, and pre-commercial thinning will produce income to the school trust, restore healthy forest stand conditions in the currently overstocked areas, and increase the future income generating capacity of the land by favoring increased tree growth in thinned areas.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

This analysis reviewed the potential for all anticipated natural and human environmental effects from the proposed action. Standard procedures, compliance with Forestry Best Management Practices, and our Forest Management Administrative Rules, and specific design constraints result in no anticipated significant direct or cumulative adverse effects from this proposal.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

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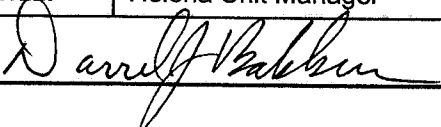
EIS

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More Detailed EA

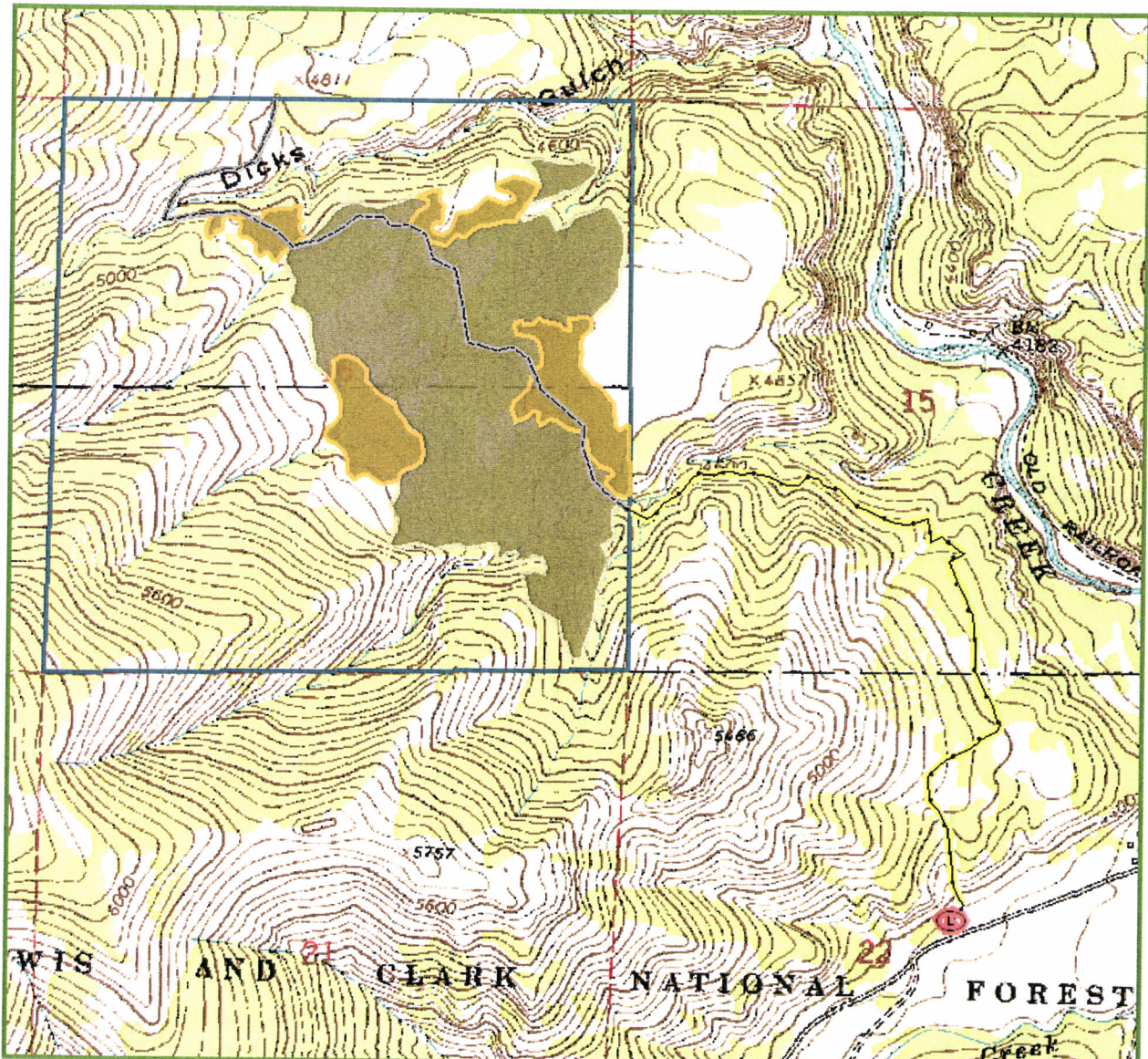
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No Further Analysis

EA CHECKLIST APPROVED BY:	NAME:	D.J. Bakken		
	TITLE:	Helena Unit Manager		
SIGNATURE:			DATE:	4/28/2006

CROWN BUTTE Timber Sale

Section 16, Township 16 North, Range 6 East



Mapped By: SHawn P. Morgan

Timber Harvest / Pre-Commercial Thin Map

Department of Natural Resources
and Conservation,
Helena Unit

1 inch equals 1,320,000,000 feet

800 400 0 800 1,600 2,400 3,200 Feet



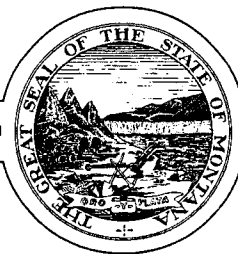
LEGEND

- Landing Area
- Forward Trail / Private - 1.26 Miles
- Existing Trail / State - 1.54 Miles
- Crown Butte Project Area
- Prescription
 - Commercial Timber Harvest - 165 acres
 - Pre-Commercial Harvest - 43 acres
 - State Ownership

DEPARTMENT OF NATURAL
RESOURCES AND CONSERVATION

NORTHEASTERN LAND OFFICE

DNRC - Trust Land Management Division



STATE OF MONTANA

(406) 265-5236 Telephone
(406) 265-5236 FAX

HAVRE UNIT OFFICE
PO BOX 868
210 SIXTH AVENUE
HAVRE, MONTANA 59501-0868

May 10, 2006

MEMORANDUM

TO: Clive Rooney, Area Manager, Northeastern Land Office
Julie David, Supervisor, Mineral Leasing Section

FR: Dan Dobler, Havre Unit Manager, Northeastern Land Office

RE: Devon Energy Production Company, LP – Lessee and Operator
State of Montana Oil & Gas Lease #10,483-68
Township 32 North, Range 15 East, M.P.M.
Section 21: SE $\frac{1}{4}$ SE $\frac{1}{4}$
Hill County, Montana
State #21-16 Well (SESE)

RECEIVED
MAY 12 2006
DNRC NELO

RECEIVED

JUN 30 2006

LEGISLATIVE ENVIRONMENTAL
POLICY OFFICE

Devon Energy Production Company, LP is proposing to drill an exploratory natural gas well and construct an access road into the well site across the above referenced tract of fee grazing land. The State of Montana owns the mineral rights in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 21. However, the surface is owned by William H. Armstrong Jr. I conducted an on-site inspection of the proposed natural gas well and access road with Brent Sande, Landman for Devon Energy. Devon Energy had originally planned to drill the State #21-9 well in the (NESE) portion of this section, but the location was moved to the (SESE) and became the State #21-16 well. Brent and I discussed environmental concerns, reclamation procedures, and surface damage settlement issues that we had for this project. William H. Armstrong Jr. is the surface owner in the area of the proposed disturbance and has been notified about the location of the proposed well site and access road across his grazing land. Devon Energy is currently in the process of settling damages to the grazing land resource with Mr. Armstrong Jr.

Enclosed you will find an Environmental Assessment Checklist for your review. I have concluded in the EA Checklist that minimal negative environmental impacts are expected with this type of project occurring on native grazing land. I have outlined my concerns and listed the mitigation measures that must be implemented for the reclamation of this natural gas well site. These mitigation measures are found within the drilling stipulations listed on the attached page. Please review the EA Checklist, sign and date it, and return a finalized copy to me. Please forward a copy of the executed EA Checklist to Connie Daruk in Helena, so that she may forward it to the Environmental Quality Council. I used a Trimble global positioning system to map the well pad on this tract of land. Enclosed you will find two GIS maps with the natural gas well pad plotted in.

I am recommending that the Department issue Devon Energy Production Company, LP a permit to drill the State #21-16 (SESE) natural gas well and construct an access road into the well site across the above referenced tract of fee land. If you have any further questions regarding this matter, please contact me at the Havre Unit Office and I will be glad to assist you.

Enclosures: EA Checklist/Drilling Stipulations/GIS Maps

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name: Proposed Exploratory Natural Gas Well State #21-16 Well (SESE)	Proposed Implementation Date: July 1, 2006
Proponent: State of Montana Oil & Gas Lessee and Operator – Devon Energy Production Company, LP C/o Brent Sande, PO Box 1644, Havre, MT 59501	
Type and Purpose of Action: Devon Energy Production Company, LP is proposing to drill an exploratory natural gas well and construct an access road into the well site across a tract of native grazing land. The State of Montana owns the mineral rights in the SE¼SE¼ of Section 21 and the surface is owned by William H. Armstrong Jr. The Montana Department of Natural Resources and Conservation (DNRC), Trust Land Management Division (TLMD) is the agency responsible for administrating all subsurface activity on lands that have mineral rights held by the State of Montana. If the natural gas well is capable of commercial production, Devon Energy Production Company, LP will have to bury a pipeline to transport the natural gas off to market. Devon Energy Production Company, LP must obtain a permit to drill the State #21-16 well from the Montana DNRC, prior to conducting any surface activities on this tract of native grazing land.	
Location: SE¼SE¼, Sec. 21, T32N, R15E	County: Hill County, Montana

I. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: Provide a brief chronology of the scoping and ongoing involvement for this project.	The Montana Department of Natural Resources and Conservation has been petitioned by Devon Energy Production Company, LP to drill an exploratory natural gas well and construct an access road into the well site across the above referenced tract of native grazing land. The State of Montana owns the mineral rights in the SESE of Section 21 and the surface is owned by William H. Armstrong Jr. Brent Sande, Landman for Devon Energy has contacted Mr. Armstrong Jr. regarding their intentions to drill a natural gas well and construct an access road into the well site across this tract of native grazing land. If the natural gas well is capable of commercial production, Devon Energy will bury a pipeline to transport the natural gas off to market. Damages to the grazing land will be settled with Mr. Armstrong Jr. within a reasonable time period following the completion of the natural gas well. If successful, the natural gas well will generate additional revenue for the State of Montana's School Trust Fund and Devon Energy in the form of royalties from the sale of natural gas.
2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:	The Montana DNRC/TLMD's; Havre Unit Office, Minerals Management Bureau, and the Montana Board of Oil and Gas are the only governmental agencies that have jurisdiction for this type of activity on lands that have mineral rights owned by the State of Montana. Devon Energy Production Company, LP will need to obtain a permit to drill the State #21-16 well from the Montana DNRC, prior to conducting any surface activities on this tract of native grazing land.

3. ALTERNATIVES CONSIDERED:	<p>Action Alternative: Grant Devon Energy permission to drill the State #21-16 gas well and construct an access road into the well site across this tract of fee grazing land. Mitigation measures will be used to limit the impact to the grazing resource and control future erosion problems. The Montana DNRC will issue Devon Energy Production Company, LP a permit to drill the State #21-16 gas well and construct an access road into the well site across this tract of fee land.</p> <p>No Action Alternative: Deny Devon Energy permission to drill the State #21-16 gas well and construct an access road across this tract of fee land. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land.</p>
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II. IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS
<p>4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</p> <p>Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>	<p>Action Alternative: The proposed natural gas well is located approximately 6 miles southwest of Havre, Montana. Devon Energy will disturb the soils on this tract of grazing land by drilling an exploratory natural gas well and constructing an access road into the well site across this tract of grazing land. The proposed natural gas well is located on nearly flat to gently rolling, native grazing land that has silty-clay loam soils. The soils located within the area of the proposed disturbance are suitable for this type of activity. During construction of the site, mitigation measures will be used to stockpile the topsoil upslope from the project, so that it may be used for reclaiming the site. The subsoil and excessive dirt will be stock piled in a separate pile, down-slope from the project and used first for fill. There are no special reclamation considerations for the project. No unusual geologic features are present in the area of the proposed disturbance. The Montana DNRC has already set up a reclamation plan for reclaiming the well sites and the access roads, if the wells are not capable of commercial production.</p> <p>(Continued on Next Page)</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?

(Continued from Previous Page)

No Action Alternative: The soils on this tract of native grazing land will not be disturbed. The Montana DNRC will not issue Devon Energy a reclamation plan for this project. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site on this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?

Action Alternative: The project will have a minimal impact on surface and groundwater resources in the surrounding area. Drilling an exploratory natural gas well will not impact the water quality, quantity, and distribution found in this area. The proposed natural gas well is located in a rural area that is primarily used for livestock grazing purposes, agricultural production of small grains, housing, and wildlife habitat. There is no potential to violate any ambient water quality standards with this project. Drinking water will not be contaminated with this type of activity. The water quality will not be degraded in this area.

No Action Alternative: The water quality, quantity, and distribution currently found on this tract of grazing land will not be altered. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

6. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?

Action Alternative: Drilling an exploratory natural gas well and constructing an access road into the well site will produce some dust particulates, throughout the entire process of building the well site and drilling the natural gas well. The project is not influenced by air quality regulations or zones. Once the drill pad is completed and the gas well has been drilled, the air quality will return to normal. There will no longer be substantial traffic in and out of this tract of land from the drilling crew.

No Action Alternative: The air quality will not be impacted in this area. No dust particulates will be produced from the substantial traffic in and out of this tract of grazing land. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas.

7. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?

Action Alternative: The area of the proposed disturbance is located on native grazing land that is used primarily for livestock grazing. The proposed project area does not contain any rare plants or cover types. The topsoil excavated from the site will be stock piled upslope from the project and used last to cover the disturbed area for reclaiming the site.

No Action Alternative: The vegetative cover, quantity, and quality currently found on this tract of native grazing land will not be altered. Wildlife habitat will not be impacted on this tract. The vegetative cover, quantity, and quality will remain in its natural state on this tract of grazing land. The topsoil will not be disturbed and there will be no need for a reclamation plan. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Is there substantial use of the area by important wildlife, birds or fish?

Action Alternative: The terrestrial and avian life and habitat found on this tract of grazing land is very minimal. The habitat found in the immediate area of disturbance will be impacted with the construction of the drill pad and access road. The area of disturbance will be small in scope and shall be reclaimed with the terms and conditions outlined within the well drilling stipulations provided by the Montana DNRC. Many different types of wildlife species use this area for habitat. Those species include whitetail deer, mule deer, antelope, badger, skunk, the Columbian ground squirrel, red fox, coyote, as well as many different types of songbirds, upland game birds, and waterfowl. Wildlife species may be temporarily displaced, while the gas wells are being drilled. However, no wildlife species will be permanently relocated as a result of this project. The proposed project will not have any long-term impacts on wildlife species or their associated habitats that currently exist on this tract of grazing land.

No Action Alternative: The terrestrial and avian life and their associated habitats found within this area will not be disturbed. Wildlife and birds species will continue to use this area as they have in the past. These species will not be temporarily displaced by drilling an exploratory natural gas well. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Sensitive Species or Species of special concern?

Action Alternative: The area of the proposed project is located on grazing land that is used for livestock grazing. The proposed natural gas well and access road will have a minimal impact on the unique, endangered, fragile, and limited environmental resources present in this area. There are no wetlands located within the immediate area of disturbance. No sensitive species or species of special concern will be threatened by this project. Listed, threatened, or endangered species will be able to migrate through this area with minimal impact. There is no confirmed use of this area by threatened or endangered species; however the potential of occasional use does exist.

(Continued on Next Page)

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

<p>9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Sensitive Species or Species of special concern?</p>	<p>(Continued from Previous Page)</p> <p>No Action Alternative: The unique, endangered, fragile and limited environmental resources found on this tract of grazing land will not be permanently altered. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas.</p>
<p>10. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>Action Alternative: Staff from the Montana Department of Natural Resources and Conservation has inspected the proposed well site and access road for historical and archaeological resources. The proposed well site and access road are located on grazing land. No visual surface features were discovered during the on-site inspection of the proposed areas of disturbance. If historical or archaeological resources are discovered at any time during construction of the access road or the well site, the proponent will cease all activity and contact the MT DNRC's, Havre Unit Office (406)-265-5236.</p> <p>No Action Alternative: There are no known historical or archaeological resources present in the area of the proposed project. Unknown historical or archaeological features under the surface will not be altered. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas.</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

<p>11. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?</p>	<p>Action Alternative: If successful, the natural gas well will become prominent topographic feature. The shed that houses the well head and natural gas meters will be visible to the public, if this gas well is successful and capable of commercial production. The project is located approximately 6 miles southwest of Havre, Montana. The land is primarily used for livestock grazing purposes. The project will produce some excessive noise during the entire stages of drilling the natural gas wells. Once the well is drilled, the noise levels will return to normal. The area of the proposed project is being developed for natural gas production. Several natural gas wells have already been drilled in the area and more are proposed on adjacent lands surrounding this tract.</p> <p>No Action Alternative: The aesthetics that are currently found on this tract of grazing land will not be impacted. The natural gas well will not become prominent topographic feature on this tract of land. This tract of fee land will continue to be used solely for livestock grazing purposes. Wildlife species will not be temporarily displaced. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas.</p>
<p>12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?</p>	<p>Action Alternative: This project will demand the environmental resources of natural gas and a small portion of land for the well site and access road. The demand on the environmental resources of air and water will be minimal. Once the project is completed, the proponent will reclaim the site with the terms and conditions outlined within the well drilling stipulations provided by the Montana DNRC. If the well is capable of commercial production, the proponent will need to install a pipeline to transport the natural gas off to market. There are no other activities nearby that will affect this project.</p> <p>No Action Alternative: There will be no additional demands on the environmental resources of land, water, air, or energy that are currently found on this tract of agricultural land. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well on this tract of grazing land.</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA: Are there other studies, plans or projects on this tract?

Action Alternative: The Montana DNRC will continue to explore for natural gas resources on tracts of land that have mineral rights owned by the State of Montana. The mineral rights in the SESE of Section 16 are owned by the State of Montana's, School Trust Fund and revenue brought in from these developments will continue to be used for educational purposes by the beneficiaries of the Trust. The MT DNRC will continue to explore and develop natural gas facilities as long as they are environmentally safe. The goal of the Montana DNRC/TLMD is to manage the State of Montana's trust land resources to produce revenue for the trust beneficiaries, while considering environmental factors and protecting the future income-generating capacity of the land.

No Action Alternative: The project will not impact other studies, plans, or projects that the Montana DNRC has for this tract of land. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas.

III. IMPACTS ON THE HUMAN POPULATION

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>14. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?</p>	<p>Action Alternative: Devon Energy, its subcontractors, and/or their employees understand the risks associated with drilling an exploratory natural gas well. Devon Energy, its subcontractors, and their employees assume these risks as occupational hazards. This project will not add to the human health and safety risks found in this area.</p> <p>No Action Alternative: The project will not add to the health or human safety risks found in this area. Devon Energy will not assume any occupational hazards by not drilling the natural gas well and constructing an access road into the well site across this tract of grazing land. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas.</p>
<p>15. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?</p>	<p>Action Alternative: Drilling an exploratory natural gas well and constructing an access road into the well site will create additional industrial activity on this tract of fee grazing land. If Devon Energy Production Company, LP is successful in drilling a producing natural gas well; the School Trust Fund of Montana will generate additional revenue through royalties from the sale of natural gas. However, after the reclamation process is completed, these areas will be enhanced in the long run for livestock grazing purposes.</p> <p>No Action Alternative: The industrial, commercial, and agricultural activities will not be altered on this tract of fee grazing land. There will be no additional revenue generated from royalties to the School Trust Fund or Devon Energy. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land.</p>

<p>16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p><u>Action Alternative:</u> The project will provide Devon Energy with revenue generated by the sale of natural gas. The State of Montana's, School Trust Fund will benefit from royalties, through the sale of natural gas. This project will not move or eliminate jobs within the surrounding area. The project will provide Devon Energy's employees with additional work and income.</p> <p><u>No Action Alternative:</u> The quality and distribution of employment will be impacted in this area. Devon Energy is scheduled to drill several natural gas wells in this area. If they are not allowed to drill this well on this tract of land, they will simply move on to the next well on the drilling schedule. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct access roads into the well sites on this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas.</p>
<p>17. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?</p>	<p><u>Action Alternative:</u> The project will create additional tax revenue in Hill County, if the well is successful and capable of commercial production. Therefore, the project will have an impact on the local and state tax base.</p> <p><u>No Action Alternative:</u> The local and state tax base will remain the same. Tax revenue will not be impacted in Hill County by not drilling the natural gas well. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas.</p>

<p>18. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?</p>	<p>Action Alternative: The project will create some substantial traffic throughout the entire phase of drilling the natural gas well and constructing the access road. Devon Energy has been informed, as to where the access road into the well site will be placed. The access road will leave the county road from the west and tie into the perspective well to the east. The project will not create a demand for government services. The project will not require the services of fire protection, police, or schools.</p> <p>No Action Alternative: There will be no additional demand for government services on this tract of agricultural land. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas.</p>
<p>19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>Action Alternative: The project will not interfere with any other locally adopted environmental plans or goals. No zoning plans will be in effect for the installation of a natural gas well and an access road across this tract of grazing land. The Montana DNRC will continue to explore and develop natural gas facilities on lands that the State of Montana owns the mineral rights. Environmental Assessment Checklist's will continue to be the basis of conclusion for future development or further study of projects such as this.</p> <p>No Action Alternative: There are no other known locally adopted environmental plans or goals for this tract of grazing land. The Montana DNRC will continue to work with natural gas companies to explore and develop natural gas production on tracts of land in which the State of Montana owns the mineral rights. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas.</p>

<p>20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?</p>	<p>Action Alternative: The proposed natural gas well is not located on a legally accessible tract of land. The proposed project area is not accessible to the general public for recreational purposes because the surface is privately owned. The natural gas well and access road will have a minimal impact on the future recreational activities that may occur on this tract of grazing land.</p> <p>No Action Alternative: This tract of grazing land will continue to remain not legally accessible to the public for recreational purposes. The recreational potential for this tract of land will continue to be low. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas.</p>
<p>21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?</p>	<p>Action Alternative: The project will not add to the population or require additional housing. The density and distribution of population and housing will continue to be moderate in this rural area. The project will be completed within two to three days and the drill crew will leave the site. If the natural gas well is successful, Devon Energy will have to bury a pipeline to transport the natural gas off to market. This activity may require the presence of Devon employees for an additional day or two.</p> <p>No Action Alternative: The density and distribution of population and housing will continue to be moderate in this rural ranching and farming community. The Montana DNRC/TLMD is the agency responsible for any surface and subsurface activity on lands owned by the State of Montana. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas.</p>

<p>22. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or community's possible?</p>	<p>Action Alternative: The project may disrupt some native or traditional lifestyles found within this rural area. The proposed natural gas well is located in the middle of a sub-division. Drilling an exploratory natural gas well and constructing an access road into the well site may change the social structures and mores found in this area. Natural gas exploration, development, and production are already somewhat high in this area. Devon Energy has been really responsible for their actions and they are willing to do whatever it takes to make people happy and get the job done right.</p> <p>No Action Alternative: The native and traditional lifestyles will not be impacted in this rural ranching and farming community. The people who live in this area have natural gas wells on their own lands and collect royalties as well. The native and traditional lifestyles found in this area will continue to remain the same. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas.</p>
<p>23. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?</p>	<p>Action Alternative: The proposed natural gas well and access road will not cause a shift in any of the unique qualities found in this area. No cultural artifacts or surface features were observed or noted in the area of the proposed disturbance. Natural gas production is important to the people in this area, because it provides jobs and additional income for the people who live and work in this area.</p> <p>No Action Alternative: The cultural uniqueness and diversity of the land and its people will remain the same. This tract of fee grazing land will continue to be used solely for livestock grazing. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas.</p>

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC
CIRCUMSTANCES:

Action Alternative: The project will generate additional revenue for the State of Montana's School Trust Fund and Devon Energy Production Company, LP through royalties from the sale of natural gas, if the well is successful and capable of commercial production. The surrounding communities will benefit from projects such as this through lodging, gas, and food purchased by the drilling crew and Devon employees. The people in the surrounding area may be more open to natural gas exploration on their own lands, if this project is done right and is environmentally sound.

No Action Alternative: The potential for additional revenue for the State of Montana's School Trust Fund, Devon Energy, and the people in the surrounding area will be lost. The Montana DNRC will not issue Devon Energy Production Company, LP a permit to drill the State #21-16 well and construct an access road into the well site across this tract of grazing land. The State of Montana's School Trust Fund and Devon Energy will not receive potential royalty payments from the sale of natural gas. There are no other appropriate social and/or economic circumstances to discuss within this Environmental Assessment Checklist.

EA Checklist Prepared By: Dan Dobler
Name

Havre Unit Manager
Title

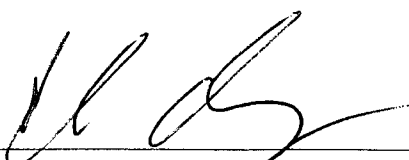
Dan Dobler
Signature

May 10th, 2006
Date

IV. FINDING	
25. ALTERNATIVE SELECTED:	Action
26. SIGNIFICANCE OF POTENTIAL IMPACTS:	N.S.I.
27. Need for Further Environmental Analysis: <input type="checkbox"/> EIS <input type="checkbox"/> More Detailed EA <input checked="" type="checkbox"/> No Further Analysis	

EA Checklist Approved By: Clive Rooney
Name

Area Manager, Northeastern Land Office
Title


Signature

5-12-6
Date

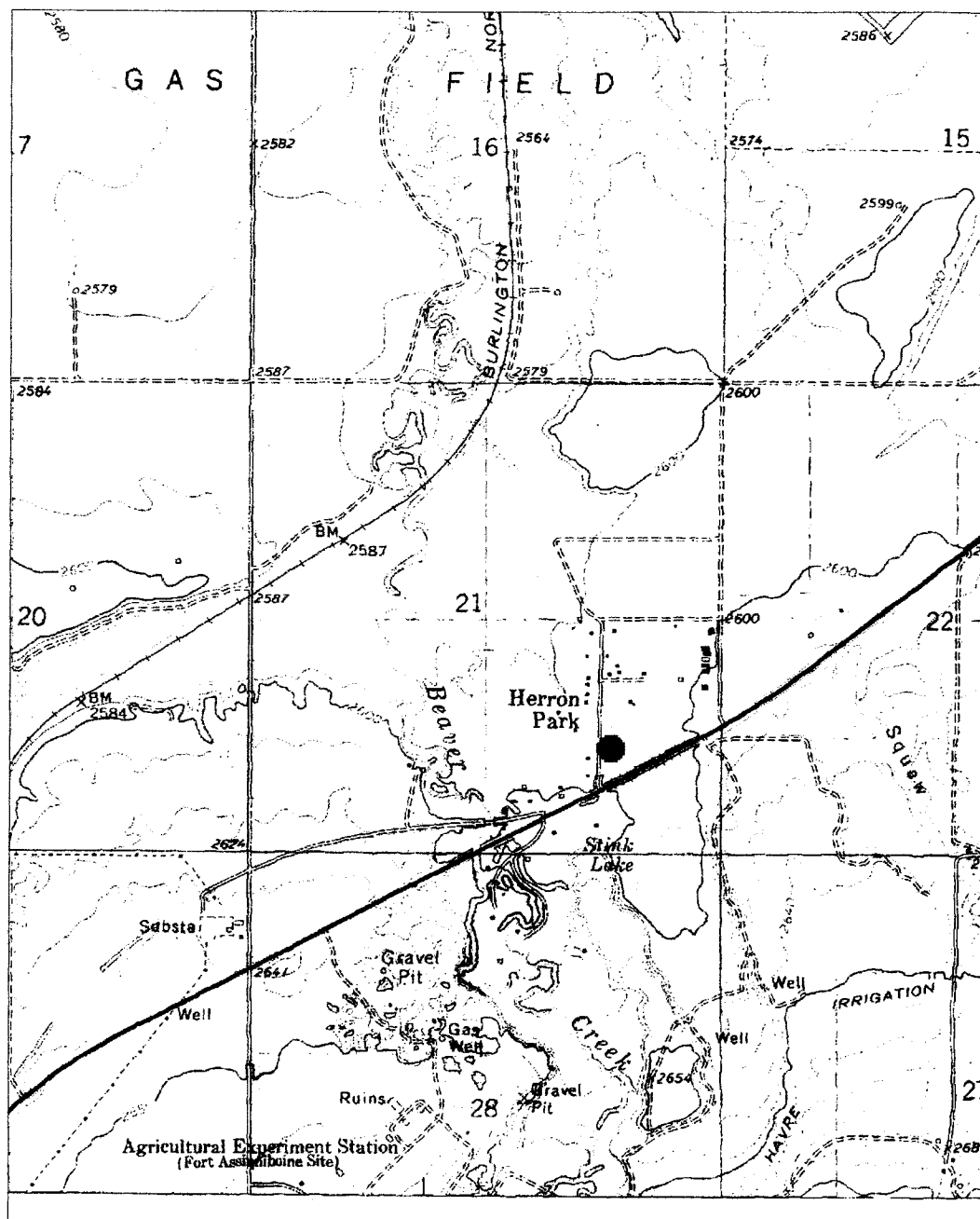
State of Montana

Natural Gas Exploratory Well Drilling Stipulations for Oil & Gas Lease #10,483-68

Proposed State #21-16 Well (SE¼SE¼) - Hill County, Montana

1. The permittee shall contact the Havre Unit Office, PO Box 868, Havre, MT 59501, (406) 265-5236, 48 hours prior to any surface activity.
2. The permittee shall contact fee surface owner, William H. Armstrong Jr., 48 hours prior to any drilling activity. The permittee shall settle all surface damages with Mr. Armstrong within a reasonable time period following the completion of the natural gas well.
3. The permittee shall be responsible for controlling any noxious weeds introduced by the permittee's activity on the fee land and shall prevent or eradicate the spread of those noxious weeds onto deeded and state land adjoining the premises.
4. The permittee shall also be responsible for controlling all annual weeds around the well site, access road, and pipeline route across this tract of grazing land.
5. This tract of land does not contain any known archaeological, historical, or paleontological resources in the area of the proposed disturbance. The area of disturbance is located in an agricultural field that has already been previously disturbed. However, if any of these resources are located, the permittee shall cease all drilling activity and contact the appropriate Area Office, Unit Office, and Department Archaeologist in Helena immediately. The Department reserves the right to restrict surface activity for the purposes of protecting significant cultural resources.
6. In order to prevent the introduction of noxious weeds on this tract of land, all equipment used on this project must be initially power washed prior to use.
7. Natural gas drilling and service activity may occur on dry or frozen ground only. No activity will be allowed during muddy conditions.
8. No vehicle oil changes or petroleum disposal shall occur on this tract of land.
9. There will be no off-road traffic other than that necessary to accomplish the gas well drilling and construction of the access road into the well site.
10. All gates will be closed and all fences that are taken down will be repaired as soon as possible.

11. The topsoil removed from the site must be located upslope from the project and used for covering the subsoil. Subsoil and excessive dirt must be located downslope from the project and used first for fill. This practice shall be used for installing the pipeline, if the well is successful and capable of commercial production.
12. The access road must be kept to its initial size in order to minimize the impact on the native grazing land. Turn-arounds must be kept to their initial size and they are not to be expanded on. The tear drop must be as close to the drill pad as possible.
13. All disturbed areas shall be seeded with State of Montana Certified or Registered seed. The seed mixture shall be planted in the amounts specified in pounds of pure live seed per acre (PLS/acre). The seed mixture shall consist of 5 lbs. PLS/acre 'Rosana' western wheatgrass, 5 lbs. PLS/acre 'Pryor' slender wheatgrass, 4 lbs. PLS/acre 'Lodorm' green needlegrass, and 1 lb. PLS/acre yellow sweetclover (seed poundage is to be doubled if area is broadcast seeded). The seeding will be repeated until a satisfactory stand is established as determined by the Havre Unit Office.



Devon Energy Production Company, LP State #21-16 Well (SESE)

US State Plane 1983
Montana 2500
NAD 1983 (Conus)



Scale 1:24,000



Feet

D-State 21-16 (SESE).cor
5/10/2006

GPS Pathfinder[®] Office
Trimble.



Devon Energy Production Company, LP
State #21-16 Well (SESE)

US State Plane 1983
Montana 2500
NAD 1983 (Conus)

N

Scale 1:24,000



Feet

D-State 21-16 (SESE).cor
5/10/2006

GPS Pathfinder[®]Office
 **Trimble.**

DEPARTMENT OF NATURAL
RESOURCES AND CONSERVATION
NORTHEASTERN LAND OFFICE



STATE OF MONTANA

(406) 265-5236 Telephone
(406) 265-5236 FAX

RECEIVED
MAY 12 2006
DNRC NELO

HAVRE UNIT OFFICE
PO BOX 868
210 SIXTH AVENUE
HAVRE, MONTANA 59501-0868

May 9, 2006

DNRC - Trust Land Management Division

MEMORANDUM

TO: Clive Rooney, Area Manager, Northeastern Land Office
Julie David, Supervisor, Mineral Leasing Section

FR: Dan Dobler, Havre Unit Manager, Northeastern Land Office *Dan Dobler*

RE: Helis Oil & Gas Company, LLC - Lessee and Operator
Energy Consultants, LLC - Agent
State of Montana Oil & Gas Lease #10,858-68
Battle Creek #14-16 Well (SESW)
Township 36.0 North, Range 19.0 East, M.P.M.
Section 16: All, (From the surface to the base of the Eagle formation)
Blaine County, Montana

RECEIVED

JUN 30 2006

LEGISLATIVE ENVIRONMENTAL
POLICY OFFICE

Helis Oil & Gas Company, LLC has notified the Montana Department of Natural Resources and Conservation of their intentions to drill an exploratory natural gas well on the above referenced tract of state land. Helis Oil & Gas Company is the State of Montana's oil and gas lessee on this tract of state land. Energy Consultants, LLC will be handling the drilling operations on behalf of Helis Oil & Gas Company, LLC. I conducted an on-site inspection of the proposed natural gas well on Monday, May 1, 2006. I have outlined my concerns within the drilling stipulations listed on the attached page. S Bar B Ranch Corp., C/o Jack Davies is the state's surface lessee on this tract of native grazing land. Helis Oil & Gas Company, LLC will be required to settle all surface damages with the State of Montana and S Bar B Ranch Corp. - C/o Jack Davies, prior to drilling the natural gas well.

Enclosed you will find an Environmental Assessment Checklist for your review. I have concluded in the EA Checklist, that no large-scale or negative impacts are expected on this tract of native grazing land, as long as Helis Oil & Gas Company follows the stipulations that I have set in place for drilling this natural gas well. Please review the EA Checklist, sign and date it, and return a finalized copy to me. Please forward a copy of the executed EA Checklist to Connie Daruk in Helena, so that she may forward it to the Environmental Quality Council. I used a Trimble global positioning system to map the drill pad area and the access road into the well site. I have attached a GIS map with the proposed access road and drill pad area for your convenience. I am recommending that the Department issue Helis Oil & Gas Company, LLC a permit to drill an exploratory natural gas well on this tract of state grazing land. If you have any questions regarding this matter, please contact me at the Havre Unit Office and I will be glad to assist you.

Enclosures: EA Checklist/Drilling Stipulations/GIS Map

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name: Battle Creek #14-16 Gas Well (SESW)	Proposed Implementation Date: May 20 th , 2006
Proponent: State of Montana Oil & Gas Lessee & Operator - Helis Oil & Gas Company, LLC, 228 St. Charles Avenue, Suite 912, New Orleans, LA 70130 – Energy Consultants, LLC, PO Box 159, Billings, MT 59103-0159	
Type and Purpose of Action: Helis Oil & Gas Company, LLC has notified the Montana DNRC of their proposal to drill an exploratory natural gas well on a tract of state grazing land in northern Blaine County. Energy Consultants, LLC is the agent for Helis and they will be conducting the drilling operations for this exploratory natural gas well. The Montana Department of Natural Resources and Conservation (DNRC), Trust Land Management Division (TLMD) is responsible for administrating all mineral exploration activity on State School Trust lands. The State of Montana owns the mineral rights and the surface on this entire section of land. If the natural gas well is capable of commercial production, Helis Oil & Gas Company will bury a 3" poly pipeline to transport the natural gas to an existing gathering pipeline south of the proposed well site on this tract of state land. Helis Oil & Gas Company, LLC will settle all surface damages with the State of Montana and S Bar B Ranch Corporation – C/o Jack Davies, prior to drilling the natural gas well.	
Location: SE¼SW¼; Sec. 16, T36N, R19E	County: Blaine County, Montana

I. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: Provide a brief chronology of the scoping and ongoing involvement for this project.	Helis Oil & Gas Company, LLC has notified the Montana Department of Natural Resources and Conservation of their intentions to drill an exploratory natural gas well on the above referenced tract of state land. The mineral rights and the surface on this entire section are owned by the State of Montana. Energy Consultants, LLC will be conducting the drilling operations for this project. Helis Oil & Gas Co. will contact the State's surface lessee, S Bar B Ranch Corporation, C/o Jack Davies regarding their intentions to drill a natural gas well on this tract of state grazing land. If the natural gas well is capable of commercial production, Helis Oil & Gas Co. will bury a 3" poly pipeline across this tract of state land to an existing gathering pipeline located just south of the proposed well site. Surface damages will be settled with S Bar B Ranch Corp., C/o Jack Davies and the State of Montana, prior to drilling the natural gas well. If successful, the natural gas well will generate additional revenue for the State of Montana's, School Trust Fund and Helis Oil & Gas Company, LLC in the form of royalties from the sale of natural gas.
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2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:	The Montana DNRC/TLMD's; Havre Unit Office, Minerals Management Bureau, and the Montana Board of Oil and Gas are the only governmental agencies that have jurisdiction for this type of project on State School Trust land. Helis Oil & Gas Co. will need to obtain a drilling permit from the Montana DNRC, prior to conducting any surface activities on this tract of state grazing land.
3. ALTERNATIVES CONSIDERED:	<p>Action Alternative: Grant Helis Oil & Gas Co. permission to drill an exploratory natural gas well on this tract of State School Trust land. The Montana DNRC will issue Helis Oil & Gas Co. a permit to drill a natural gas well on this tract of state land. Mitigation measures will be implemented to limit the impact on the native rangeland resource.</p> <p>No Action Alternative: Deny Helis Oil & Gas Co. permission to drill an exploratory natural gas well on this tract of State School Trust land. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill a natural gas well on this tract of state land.</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS
<p>4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p> <p>(Continued on Next Page)</p>	<p>Action Alternative: The proposed natural gas well is located approximately 20 miles north of Chinook, Montana. Helis Oil & Gas Company will disturb the soils on this tract of native grazing land by drilling an exploratory natural gas well. The proposed natural gas well is located on gently-rolling plains that consist of a short-grass prairie that has silty-clay loam soils. The soils in this area are suitable for this type of activity. During construction of the site, mitigation measures will be used to stockpile the topsoil upslope from the project, so that it may be used for reclaiming the site. The subsoil and excessive dirt will be stock piled in a separate pile, down-slope from the project and used first for fill. These mitigation measures will also be used to bury a pipeline, if the well is capable of commercial production. There are no special reclamation considerations for the proposed project. No unusual geologic features are present in the area of disturbance. The Montana DNRC has set up a reclamation plan for reclaiming the well site and access road, if the well is not capable of commercial production.</p> <p>(Continued on Next Page)</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

(Continued from Previous Page)	(Continued from Previous Page)
<p>4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compactable or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>	<p>No Action Alternative: The soils on this tract of state grazing land will not be disturbed. The Montana DNRC will not need to issue a reclamation plan to Helis Oil & Gas Co. for the reclamation of the well site. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.</p>
<p>5. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?</p>	<p>Action Alternative: The project will have a minimal impact on surface and groundwater resources in the surrounding area. Drilling an exploratory natural gas well will not impact the water quality, quantity, and distribution found in this area. The proposed natural gas well is located in a rural area that is primarily used for livestock grazing purposes and wildlife habitat. There is no potential to violate any ambient water quality standards with this project. Drinking water will not be contaminated with this type of activity. The water quality will not be degraded in this area. There is several natural gas wells already located on this tract of state land.</p> <p>No Action Alternative: The water quality, quantity, and distribution currently found on this tract of state land will not be altered. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.</p>
<p>6. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>Action Alternative: Drilling an exploratory natural gas well and building an access road into the well site will produce some dust particulates, throughout the entire drilling process. The project is not influenced by air quality regulations or zones. Once the drill pad is completed and the gas well is drilled, the air quality will return to normal. There will no longer be substantial traffic in and out of this tract of state land.</p> <p>No Action Alternative: The air quality will not be impacted in this area and no dust particulates will be produced. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

7. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?
- The vegetative communities found within this area include the following plants: western wheatgrass (*Agropyron smithii*), needle-and-thread (*Stipa comata*), blue grama (*Bouteloua gracilis*), green needlegrass (*Stipa viridula*), sedges (*Carex spp.*), sandberg bluegrass (*Poa secunda*), cudweed sagewort (*Artemisia ludoviciana*), fringed sagewort (*Artemisia frigida*), dense clubmoss (*Selaginella densa*), silver sagebrush (*Artemisia cana*), and woods rose (*Rosa woodsii*).
- Action Alternative:** The vegetative communities found within the immediate area of the proposed disturbance will be temporarily altered with this type of project. The proposed project area does not contain any rare plants or cover types. The area of disturbance is located on native rangeland. This area is primarily used for livestock grazing purposes, wildlife habitat, and natural gas production. The topsoil excavated from the site will be stock piled upslope from the project and used last to cover the disturbed area for reclaiming the site. The area of disturbance will be reclaimed with a mixture of native grasses and yellow sweetclover. Existing vegetation surrounding the area of the proposed disturbance will also help reclaim the areas disturbed by this project. The reclamation plan will be incorporated as a stipulation for the well drilling permit.
- No Action Alternative:** The vegetative communities currently found on this tract of state grazing land will not be temporarily altered. Native grasses, forbs, and shrubs will not be disturbed. The vegetative cover, quantity, and quality will remain in its natural state on this tract of state land. The topsoil will not be disturbed and there will be no need for a reclamation plan. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Is there substantial use of the area by important
wildlife, birds or fish?

Action Alternative: The habitat found in the immediate area of disturbance will be impacted with the construction of a natural gas well drill pad and access road. The area of disturbance will be small in scope and shall be reclaimed with the terms and conditions outlined within the well drilling stipulations imposed by the Montana DNRC. The disturbed area will be reclaimed with a mixture of native grasses and yellow sweetclover. The area of disturbance primarily consists of needle-and-thread (*Stipa comata*), blue grama (*Bouteloua gracilis*), green needlegrass (*Stipa viridula*), prairie junegrass (*Koeleria pyramidata*), fringed sagewort (*Artemisia frigida*), silver sagebrush (*Artemisia cana*) and western wheatgrass (*Agropyron smithii*). The area of the proposed project is best described as a short grass prairie habitat type. Many different types of wildlife species use this area for habitat. Those species include whitetail deer, mule deer, antelope, badger, skunk, the Columbian ground squirrel, red fox, coyote, as well as many different types of songbirds, upland game birds, and waterfowl. Wildlife species may be temporarily displaced, while the gas well is being drilled. However, no wildlife species will be permanently relocated as a result of this project. The proposed project will not have any long-term impacts on the wildlife species or their habitat that currently exists on this tract of state land.

No Action Alternative: The terrestrial and avian life and their associated habitats found within the area of the proposed disturbance will not be altered. Wildlife and birds species will continue to use this area, as they have in the past. These species will not be temporarily displaced by the natural gas well drilling activity. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

<p>9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Sensitive Species or Species of special concern?</p>	<p>Action Alternative: The proposed exploratory natural gas well will have a minimal impact on the unique, endangered, fragile, and limited environmental resources present in this area. There are no wetlands located within the immediate area of disturbance. No sensitive species or species of special concern will be threatened by this project. Listed, threatened, or endangered species will be able to migrate through this area with minimal impact. There is no confirmed use of this area by threatened or endangered species, however the potential of occasional use does exist.</p> <p>No Action Alternative: The unique, endangered, fragile and limited environmental resources found on this tract of state grazing land will not be impacted. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.</p>
<p>10. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>Action Alternative: Staff from the Montana Department of Natural Resources and Conservation has inspected the proposed well site for historical and archaeological resources. The proposed well site and access road are located on native rangeland. No visual surface features were identified in the immediate area of disturbance, during the on-site inspection. If historical or archaeological resources are discovered at any time during construction of the well site, the proponent shall cease all activity and contact the MT DNRC's, Havre Unit Office (406)-265-5236. The Department reserves the right to restrict surface activity for the purposes of protecting significant cultural resources.</p> <p>No Action Alternative: There are no known historical or archaeological resources present in the area of the proposed project. Unknown historical or archaeological features under the surface will not be altered. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

<p>11. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?</p>	<p>Action Alternative: If successful, the natural gas well will become a prominent topographic feature. The natural gas well will be visible to the public from a county road along the east section line of this tract. The project is located approximately 20 miles north of Chinook, Montana. The land is primarily used for livestock grazing purposes, wildlife habitat, and natural gas production. The project will produce some excessive noise, throughout the entire drilling process. Once the well is drilled, the noise levels will return to normal. The area of the proposed project is somewhat developed for natural gas production and several natural gas wells already exist on this tract of state land.</p> <p>No Action Alternative: The aesthetics that are currently found on this tract of state grazing land will not be impacted. The natural gas well will not become a prominent topographic feature. This tract of grazing land will continue to be used for livestock grazing purposes, wildlife habitat, and natural gas production. No excessive noise will be produced by the drilling rig and its crew. Wildlife species will not be temporarily displaced by this project. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.</p>
<p>12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?</p>	<p>Action Alternative: This project will demand the environmental resources of natural gas and a small portion of land for the well site and access road. The demand on the environmental resources of air and water will be minimal. Once the project is completed, the proponent will reclaim the site. If the well is showing good natural gas production, the proponent will need to bury a pipeline to an existing gathering pipeline to transport the natural gas off the state land. There are no other activities nearby that will affect this project.</p> <p>No Action Alternative: There will be no demands on the environmental resources of land, water, air, or energy that are currently found on this tract of state grazing land. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

<p>13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA: Are there other studies, plans or projects on this tract?</p>	<p>Action Alternative: The Montana DNRC will continue to explore for natural gas resources on tracts of land that have mineral rights owned by the State of Montana. The mineral rights belong to the State of Montana's, School Trust Fund and revenue brought in from these developments will continue to be used for educational purposes by the beneficiaries of the Trust. The Montana DNRC will continue to explore and develop natural gas facilities as long as they are environmentally safe. The goal of the Montana DNRC/TLMD is to manage the State of Montana's trust land resources to produce revenue for the trust beneficiaries, while considering environmental factors and protecting the future income-generating capacity of the land. The Montana DNRC/TLMD will continue to administer and monitor the existing natural gas developments and livestock grazing management as well as set stocking rates on this tract of state grazing land every ten years in accordance with Montana State Statute.</p> <p>No Action Alternative: The project will not impact other studies, plans, or projects that the Montana DNRC may have for this tract of state land. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.</p>
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III. IMPACTS ON THE HUMAN POPULATION

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>14. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?</p>	<p>Action Alternative: Helis Oil & Gas Co., its subcontractors, and/or their employees understand the risks associated with drilling an exploratory natural gas well. Helis Oil & Gas Co., its subcontractors, and their employees assume these risks as occupational hazards. This project will not add to the human health and safety risks found in this area.</p> <p>No Action Alternative: The project will not add to the human health or safety risks found in this area. Helis Oil & Gas Co. will not assume any occupational hazards by not drilling the natural gas well on this tract of state land. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.</p>

<p>15. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?</p>	<p>Action Alternative: Drilling an exploratory natural gas well will create additional industrial activity on this tract of state land. If Helis Oil & Gas Co. is successful in drilling a producing natural gas well; the School Trust Fund of Montana will generate additional revenue through royalties from the sale of natural gas. The forage production on the native rangeland will be temporarily reduced, due to the well pad disturbance. However, after the reclamation process is completed, forage production on this tract of grazing land will be enhanced in this area. In the long run, the reclamation plan to seed native grasses back into this area will increase the long-term forage productivity and enhance erosion control on these soils. The additional revenue generated from another natural gas well will increase royalty payments from this tract of land, if this natural gas well is successful.</p> <p>No Action Alternative: The industrial and livestock grazing activities will not be altered on this tract of state land. This tract of state land will continue to be used for the purposes of livestock grazing, wildlife habitat, and natural gas production. There will be no additional revenue generated from royalties to the School Trust Fund of Montana and Helis Oil & Gas Co. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.</p>
<p>16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>Action Alternative: The project will provide Helis Oil & Gas Co. with additional revenue generated by the sale of natural gas, if the well is capable of commercial production. The State of Montana's, School Trust Fund will benefit from royalties, through the sale of natural gas as well. This project will not move or eliminate jobs within the surrounding area. The project will provide Helis Oil & Gas Company, LLC employees with additional work and income.</p> <p>No Action Alternative: The quality and distribution of employment will be not impacted in this area. Helis Oil & Gas Co. is scheduled to drill several natural gas wells in this area. If they are not allowed to drill this well on the state land, they will simply move to the next well on the drilling schedule. Helis and the School Trust Fund will loose out on additional revenue that could've been generated from this tract of state land, if a successful well was drilled.</p>

<p>17. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?</p>	<p>Action Alternative: The project will create additional tax revenue in Blaine County, if the well is capable of commercial production. Therefore, the project will have an impact on the local and state tax base.</p> <p>No Action Alternative: The local and state tax base will remain the same. Tax revenue will not be impacted in Blaine County by not drilling this natural gas well. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.</p>
<p>18. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?</p>	<p>Action Alternative: The project will create some substantial traffic, throughout the entire length of time it takes to drill the natural gas well. Helis Oil & Gas Co. has been informed, as to where the access road into the well site must be placed. The project will not create a demand for government services. The project will not require the services of fire protection, police, or schools.</p> <p>No Action Alternative: There will be no additional demand for government services on this tract of state land. The Montana DNRC/TLMD will continue to monitor and administer livestock grazing management and natural gas development activities for this tract of grazing land owned by the State of Montana. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.</p>
<p>19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>Action Alternative: The project will not interfere with any other locally adopted environmental plans or goals that the Montana DNRC has for this tract of native grazing land. No zoning plans will be in effect for the installation of a natural gas well on this tract of state land. The Montana DNRC will continue to explore and develop natural gas facilities on lands that the State of Montana owns the mineral rights. Environmental Assessment Checklist's will continue to be the basis of conclusion for future development or further study of projects such as this.</p> <p>No Action Alternative: There are no other known locally adopted environmental plans or goals for this tract of state land. The Montana DNRC will continue to work with natural gas companies to explore and develop natural gas production on tracts of land in which the State of Montana owns the mineral rights. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.</p>

<p>20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?</p>	<p>Action Alternative: The proposed natural gas well is located on a legally accessible tract of state land. The proposed project area is accessible to the public for recreational purposes, via a county road along the east section line of this tract. This tract of state land does have recreational potential for hunting and bird watching. Hunting is the main recreational activity that occurs on this tract of state land. The additional natural gas well and access road will have a minimal impact on the recreational activities that may occur on this tract of state land in the future.</p> <p>No Action Alternative: This tract of state land will continue to remain legally accessible to the public for recreational purposes. The recreational potential for this tract of land will continue to be moderate. The Montana DNRC does have recreational authority, provided by the Montana Fish, Wildlife, & Parks on all tracts of state land. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.</p>
<p>21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?</p>	<p>Action Alternative: The project will not add to the population or require additional housing. The density and distribution of population and housing will continue to be low in this rural area. The project will be completed in two to three days and the drill crew will leave the site. If the natural gas well is successful, Helis Oil & Gas Co. will have to bury a pipeline across the state land to an existing gathering line to transport the natural gas off the state land. This activity may require the presence of Helis employees for an additional day or two.</p> <p>No Action Alternative: The density and distribution of population and housing will continue to remain low in this rural ranching and farming community. The Montana DNRC/TLMD is the agency responsible for any surface and subsurface activities on this tract of state land. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.</p>

<p>22. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or community's possible?</p>	<p>Action Alternative: The project will not disrupt any native or traditional lifestyles found within this rural area. Drilling an exploratory natural gas well will not change the social structure and mores found in this area. Natural gas exploration, development, and production are somewhat high in this area. There are several existing natural gas wells on this tract of state land at present time, along with several connecting pipelines and one gathering pipeline.</p> <p>No Action Alternative: The native and traditional lifestyles will not be impacted in this rural ranching and farming community. There are very few people who live in this area and natural gas development has been very important in providing jobs to the few people who in this area. The native and traditional lifestyles found in this area will continue to remain the same. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.</p>
<p>23. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?</p>	<p>Action Alternative: The proposed natural gas well and access road will not cause a shift in any of the unique qualities found in this area. No cultural artifacts or surface features were observed or noted in the area of disturbance. Natural gas production is important to the people in this area, because it provides jobs and additional income for the people who live and work in this area.</p> <p>No Action Alternative: The cultural uniqueness and diversity of the land and its people will remain the same. This tract of state land will continue to be used for wildlife habitat, livestock grazing, and natural gas production. Livestock grazing on this tract is authorized through a surface grazing lease issued by the Montana DNRC. The existing natural gas production is licensed through an oil and gas lease in which Helis Oil & Gas Company, LLC holds with the State of Montana. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land.</p>

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC
CIRCUMSTANCES:

Action Alternative: If the well is capable of commercial production, the project will generate additional revenue for the School Trust Fund of Montana and Helis Oil & Gas Co. through royalties from the sale of natural gas. The surrounding communities will benefit from projects such as this through lodging, gas, and food purchased by the drilling crew and Helis Oil & Gas Co.'s employees. The people in the surrounding area may be more open to natural gas exploration on their own lands, if this project is done right, if it's environmentally safe, and financially beneficial.

No Action Alternative: The potential for additional revenue to the State of Montana's School Trust Fund, Helis Oil & Gas Co., and the people in the surrounding area will be lost. The Montana DNRC will not issue Helis Oil & Gas Co. a permit to drill an exploratory natural gas well on this tract of state grazing land. There are no other appropriate social and/or economic circumstances to discuss within this Environmental Assessment Checklist.

EA Checklist Prepared By: Dan Dobler
Name

Havre Unit Manager
Title

Title


Dan Dobler
Signature

May 9th, 2006
Date

IV. FINDING	
25. ALTERNATIVE SELECTED:	Action
26. SIGNIFICANCE OF POTENTIAL IMPACTS:	N.S.I.
27. Need for Further Environmental Analysis: <input type="checkbox"/> EIS <input type="checkbox"/> More Detailed EA <input checked="" type="checkbox"/> No Further Analysis	

EA Checklist Approved By: Clive Rooney
Name

Area Manager, Northeastern Land Office
Title


Signature

5-12-6
Date

State of Montana

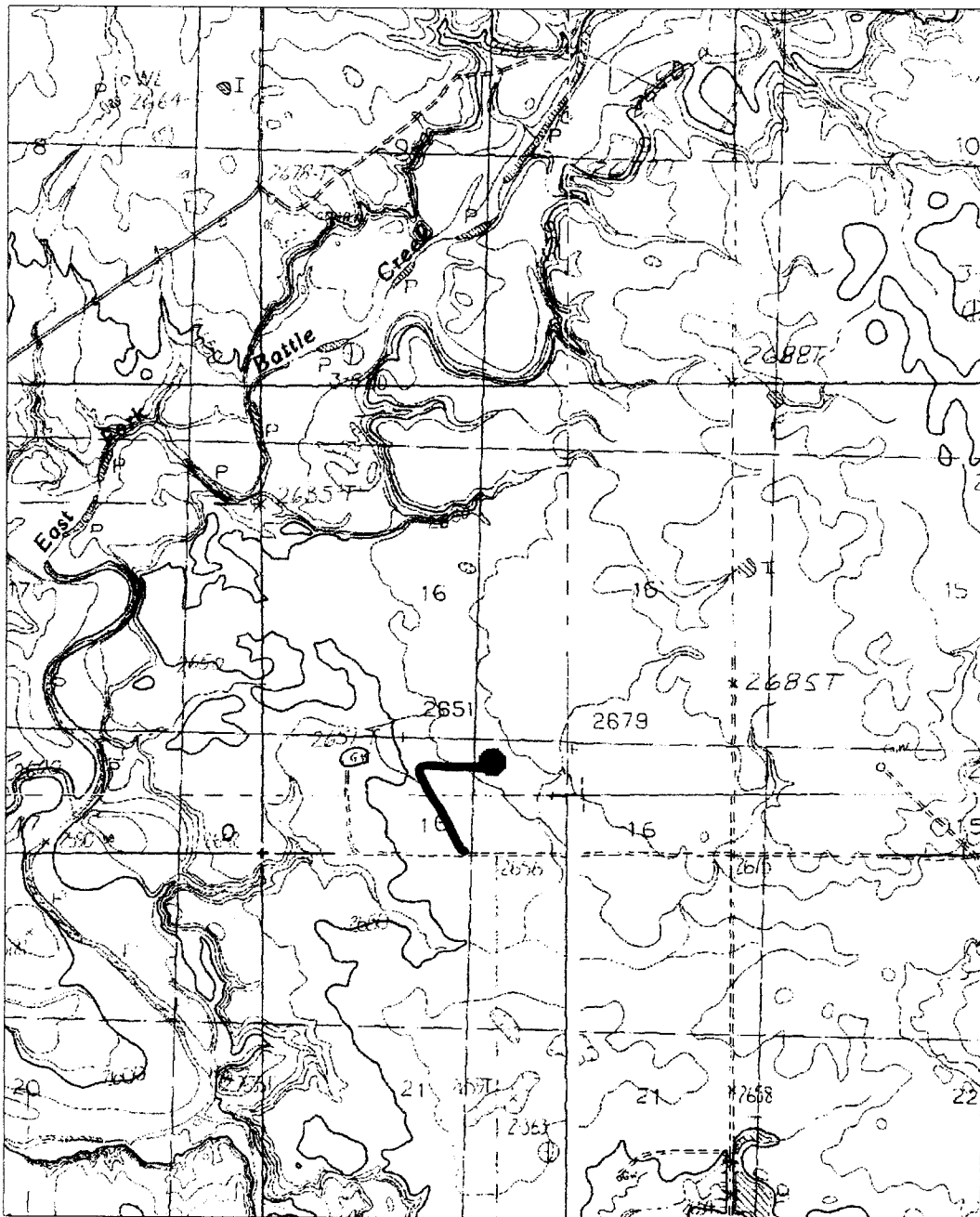
Natural Gas Exploratory Well Drilling Stipulations for Oil & Gas Lease #10,858-68

Proposed Natural Gas Well – Battle Creek #14-16 (SESW) - Blaine County

1. The permittee shall contact the Havre Unit Office, PO Box 868, Havre, MT 59501, (406) 265-5236, 48 hours prior to any surface activity.
2. The permittee shall contact the State's surface lessee, S Bar B Ranch Corp., C/o Jack Davies, PO Box 699, Chinook, MT 59523, (406) 357-3572, 48 hours prior to any drilling activity.
3. The permittee shall settle all surface damages with the State of Montana and S Bar B Ranch Corporation, prior to drilling the natural gas well.
4. The permittee shall be responsible for controlling any noxious weeds introduced by the permittee's activity on the state land and shall prevent or eradicate the spread of those noxious weeds onto federal and deeded land adjoining the premises. The permittee shall be responsible for controlling all annual weeds around the well site, access road, and pipeline route on this tract of state grazing land.
5. This tract of state land does not contain any known archaeological, historical, or paleontological resources in the area of the proposed disturbance. However, if any of these resources are located within the area of the proposed disturbance, the permittee shall cease all drilling activity and contact the appropriate Area Office, Unit Office, and Department Archaeologist in Helena immediately. The Department reserves the right to restrict surface activity for the purposes of protecting significant cultural resources.
6. In order to prevent the introduction of noxious weeds on this tract of state land, all equipment used on this project must be initially power washed prior to use.
7. Natural gas drilling activity and service may occur on dry or frozen ground only. No activity will be allowed during muddy conditions.
8. No vehicle oil changes or petroleum disposal shall occur on this tract of state land.
9. There will be no off-road traffic other than that necessary to accomplish the drilling of the natural gas well. The permittee will not be allowed to conduct any type of road construction activities, without prior approval from the Havre Unit Office. Attached is a GIS map showing the route the Department would like you to use to access the well site.

Natural Gas Well Drilling Stipulations
State of Montana Oil & Gas Lease #10,858-68
Battle Creek #14-16 Well (SESW)
Page 2

10. All gates will be closed and all fences that are taken down will be repaired as soon as possible.
11. The topsoil removed from the site must be located upslope from the project and used for covering the subsoil. Subsoil and excessive dirt must be located downslope from the project area and used first for fill. This practice shall also be used for installing a pipeline, if the well is successful and capable for commercial production.
11. The access road must be kept to its initial size in order to minimize the impact to the native rangeland resource. Turn-arounds must be kept to their initial size and they are not to be expanded on. The tear drop must be as close to the drill pad as possible.
12. All disturbed areas shall be seeded with State of Montana Certified or Registered seed. The seed mixture shall be planted in the amounts specified in pounds of pure live seed per acre (PLS/acre). The seed mixture shall consist of 4 lbs. PLS/acre 'Rosana' western wheatgrass, 4 lbs. PLS/acre 'Pryor' slender wheatgrass, 5 lbs. PLS/acre 'Lodorm' green needlegrass, and 1 lb. PLS/acre yellow sweetclover (seed poundage is to be doubled if area is broadcast seeded). The seeding will be repeated until a satisfactory stand is established as determined by the Havre Unit Office.



Helis Oil & Gas Company, LLC
Battle Creek #14-16 Well (SESW)

US State Plane 1983
Montana 2500
NAD 1983 (Conus)



Scale 1:24,000



Feet

D-BATTLE CREEK 14-16.cor

5/8/2006

GPS Pathfinder® Office



DS-252

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name: Access for Montana Flour & Grains.	Proposed Implementation Date: June 1, 2006.
Proponent: Montana Flour & Grains.	
Type and Purpose of Action: For the purpose of a safe access to private property to conduct a grain cleaning business and related activities.	
Location: SE1/4SE1/4NW1/4, Sec. 15, T24N, R8E.	County: Chouteau.

PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: Provide a brief chronology of the scoping and ongoing involvement for this project.	Mt.DNRC; Montana Flour & Grains, Andre C. Giles, President; Barbara Leinart, Lessee of State Lease #8287; Sharon Pavlovik, Chouteau County FSA Office, head of the CRP Program. The purpose for this Land Use License #3232 is to provide a safe access to private property to construct and conduct a grain cleaning and marketing facility.
2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:	Mt. Department of Agriculture, Nancy Peterson, Director. The Governor's Office of Economic Opportunity.
3. ALTERNATIVES CONSIDERED:	The "No Action" alternative. The alternative to issue a Land Use License for access until a permanent easement can be obtained.

IMPACTS ON THE PHYSICAL ENVIRONMENT

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compactible or unstable soils present? Are there unusual geological features? Are there special reclamation considerations?	[N] Silty soils are present. There are no unusual geologic features present. The surrounding area is in CRP.
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RECEIVED

JUN 30 2006

LEGISLATIVE ENVIRONMENTAL
POLICY OFFICE

IMPACTS ON THE PHYSICAL ENVIRONMENT

5.	WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?	[N] There is no potential for water degradation.
6.	AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N] Pollutants and particulates will not be produced.
7.	VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?	[Y] The CRP stand will be removed and gravel and pavement will be put in its place. There are no rare plants or cover types present.
8.	TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N] There is some use by upland game and big game animals, but it is not considered substantial.
9.	UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Sensitive Species or Species of special concern?	[N] The area in question is all in an established field of CRP. There are no species of special concern.
10.	HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archeological, or paleontological resources present?	[N] There are no Historical, Archaeological or Paleontological resources present.
11.	AESTHETICS: Is the project on a prominent topographical feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	[Y] This access rout will be just north of the town of Ft. Benton at the major highway intersection of Hwy 87 & Hwy 223. The access road will be at 1374 feet north of this intersection located on the west side of the highway. It will run east & west 554 feet to the new plant location.
12.	DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?	[N] Limited resources will not be used in this project.

IMPACTS ON THE PHYSICAL ENVIRONMENT

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA: Are there other studies, plans or projects on this tract?	[N] There are no other plans for this tract at this time.
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III. IMPACTS ON THE HUMAN POPULATION


14. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risk in the area?	[N] Human health and safety should not become affected by this project.
15. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[Y] This will be a grain cleaning and marketing facility. Commercial and agricultural activities will be enhanced.
16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[Y] New jobs are likely to be created with this facility. I do not know how many.
17. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[Y] Taxes should be created by this project.
18. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[Y] There could be substantial additional traffic due to the construction of this facility. Additional fire protection and police services are likely to be needed.
19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc., zoning or management plans in effect?	[N] None.
20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N] The surrounding area is composed of highways and CRP.
21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require	[N] Additional housing will not be required.

III. IMPACTS ON THE HUMAN POPULATION

additional housing?	
22. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] Disruption is not likely.
23. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N] There will be no shift.
24. OTHER APPROPRIATE SOCIAL AND ECONOMICAL CIRCUMSTANCES:	[Y] There is an active CRP Contract at the site location. The surface lessee and the State will have to be indemnified by Montana Flour & Grains for that acreage that is removed.

EA Checklist Prepared By:

BARNY D. SMITH, Lewistown Unit Manager, Northeastern Land Office


Signature
Date: May 8, 2006

IV. FINDING

25. ALTERNATIVE SELECTED:	The alternative to issue a Land Use License until a permanent easement can be obtained.
26. SIGNIFICANCE OF POTENTIAL IMPACTS:	Minimal negative impacts are expected with this license once the indemnification of the CRP Contract has been made.
27. Need for Further Environmental Analysis: <input type="checkbox"/> EIS <input type="checkbox"/> More Detailed EA <input type="checkbox"/> No Further Analysis	

EA Checklist Approved by:

CLIVE ROONEY, Area Manager, Northeastern Land Office


Signature

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name: Stockwater Pipeline and Tanks.	Proposed Implementation Date: June 1, 2006.
Proponent: Bessette Ranch Co.	
Type and Purpose of Action: Placement of a new stockwater pipeline with tanks that branches off of an old line. State Lease #4331 = A new stockwater pipeline just into state from an existing pipeline system, ending with a tank in NE Corner of tract. State Lease #8191 = A new stockwater tank in the SW Corner. A new stockwater pipeline going across state, finishing with a new tank in the NE Corner.	
Location: Sec. 16, T28N, R9E & Sec. 36, T28N, R8E.	County: Chouteau

PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: Provide a brief chronology of the scoping and ongoing involvement for this project.	USDA-NRCS, Stuart Lomax, Bessette Ranch Co., Mt. DNRC. RECEIVED JUN 30 2006
2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:	None. LEGISLATIVE ENVIRONMENTAL POLICY OFFICE
3. ALTERNATIVES CONSIDERED:	The "No Action" alternative. The alternative to enter into an EQIP project and build the proposed stockwater pipelines.

IMPACTS ON THE PHYSICAL ENVIRONMENT

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compactible or unstable soils present? Are there unusual geological features? Are there special reclamation considerations?	[N] Thin, silty soils are present.
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IMPACTS ON THE PHYSICAL ENVIRONMENT

5.	WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?	[N] Therefore, the need for the stockwater pipeline.
6.	AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N] Pollutants and particulates will not be produced by this project.
7.	VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?	[N] There are no rare plants or cover types present.
8.	TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N] There is some use, but it is not considered to be substantial.
9.	UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Sensitive Species or Species of special concern?	[N] There are no species of special concern, or wetlands present.
10.	HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archeological, or paleontological resources present?	[N] There where no archaeological, paleontological or historical resources noted from DNRC Field Appraisals. The NRCS Cultural Resources Report states: SHPO does not indicate anything. However there are Tee Pee rings in the area. Pipeline will be staked prior to installation.
11.	AESTHETICS: Is the project on a prominent topographical feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	[N] There will not be excessive noise or light associated with this project.

IMPACTS ON THE PHYSICAL ENVIRONMENT

12.	DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?	[N] Limited resources will not be used in the construction of this project. There is no other nearby activities that will affect this project.
13.	OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA: Are there other studies, plans or projects on this tract?	[N] None.

III. IMPACTS ON THE HUMAN POPULATION


14.	HUMAN HEALTH AND SAFETY: Will this project add to health and safety risk in the area?	[N] This project will not have an effect upon human health or safety.
15.	INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[Y] Livestock production and health will be enhanced.
16.	QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] New jobs will not be created.
17.	LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] Taxes will not be affected.
18.	DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N] Other services will not be required.
19.	LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc., zoning or management plans in effect?	[Y] This is part of an Environmental Quality Incentives Program and will be monitored by the USDA-NRCS.
20.	ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational	[Y] There is upland game and big game hunting opportunities within these tracts. The proposed pipeline & tanks will be beneficial to wildlife.

III. IMPACTS ON THE HUMAN POPULATION

areas nearby or accessed through this tract? Is there recreational potential within the tract?	
21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N] Additional housing will not be required.
22. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] Disruption is not likely.
23. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N] There should be no shift.
24. OTHER APPROPRIATE SOCIAL AND ECONOMICAL CIRCUMSTANCES:	[N] None.

EA Checklist Prepared By:

BARNY D. SMITH, Lewistown Unit Manager, Northeastern Land Office

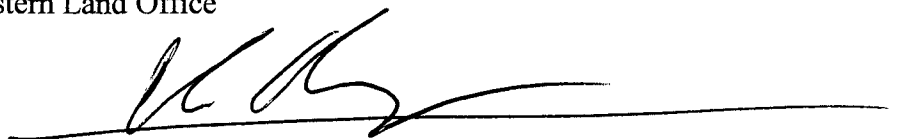

Signature
Date: May 5, 2006

IV. FINDING

25. ALTERNATIVE SELECTED:	The alternative to enter into an EQIP Project and build the proposed stockwater pipelines.
26. SIGNIFICANCE OF POTENTIAL IMPACTS:	Minimal negative impacts will result from this project.
27. Need for Further Environmental Analysis: <input type="checkbox"/> EIS <input type="checkbox"/> More Detailed EA <input type="checkbox"/> No Further Analysis	

EA Checklist Approved by:

CLIVE ROONEY, Area Manager, Northeastern Land Office



DNRC - Trust Land Management Division

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name: Vigilante Electric Cooperative Power line Right of Way Application for Upgrading City of Wisdom waste water treatment facility.

Implementation Date: Spring 2006

Proponent: Vigilante Electric Cooperative (VEC)

Type and Purpose of Action: The city of Wisdom is upgrading the city waste water treatment system. The new water treatment system has been approved by the land board and an easement for this facility has been issued to the city of Wisdom. The new treatment facility will require a power supply to operate a pivot to disperse treated waste water from the approved lagoons. The transmission line for this facility was not in the original application. VEC has applied for an easement to construct the new above ground power line parallel to the route for the new facilities access road. The purpose of the proposed project is to place a new 3 phase electric transmission line from an existing electric transmission line on private land in Section 34 to the Wisdom Sewer District lagoon and pivot. The transmission line would end slightly across the boundary of Sec. 34 in Sec. 35 (see attached map included in the application). A 20 foot easement has been requested, 10 feet to either side of the power lines (see attached map).

Location: T2S R15W Sec. 34 & 35

County: Beaverhead

I. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: Provide a brief chronology of the scoping and ongoing involvement for this project.	Tim Myllymaki of Vigilante Electric Cooperative Vigilante contacted the lessee, Crane Ranches for lessee consent. A letter was written by the Dillon Unit Land Use Specialist to the lessee seeking comment as well. No response was received. Montana DFWP Biologist Craig Fager, no problems with this project.
2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:	
3. ALTERNATIVES CONSIDERED: RECEIVED JUN 30 2006 LEGISLATIVE ENVIRONMENTAL POLICY OFFICE	1) Allow electric transmission line to be installed and grant an easement to Vigilante Electric Cooperative for the new overhead power line. 2) Do not allow electric transmission line to be installed. Do not grant easements for the line.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	[Y/N] POTENTIAL IMPACTS
	N = Not Present or No Impact will Y = Impacts may occur (explain below)
4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special	[N] Any significant disturbance will be reclaimed and / or reseeded by the applicant.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT	
reclamation considerations? Are cumulative impacts likely to occur as a result of this proposed action?	
5. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality? Are cumulative impacts likely to occur as a result of this proposed action?	[N]
6. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)? Are cumulative impacts likely to occur as a result of this proposed action?	[N]
7. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present? Are cumulative impacts likely to occur as a result of this proposed action?	[N] The site is dominated by Idaho fescue grass, and big sagebrush. The proposed transmission line project would not permanently alter the current vegetation.
8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish? Are cumulative impacts likely to occur as a result of this proposed action?	[N] Some use by whitetail and mule deer, antelope, upland game birds, raptors, and song birds. Sage grouse habitat is present. The small scale of the project would not have significant impacts on habitat for these species.
9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Sensitive Species or Species of special concern? Are cumulative impacts likely to occur as a result of this proposed action?	[N]
10. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] During a site visit no sign of historic use was apparent on the surface. Patrick Rennie was contacted in regard to the project by email. He found nothing on the database and cleared the project.
11. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light? Are cumulative impacts likely to occur as a result of this proposed action?	[N]
12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited	[N]

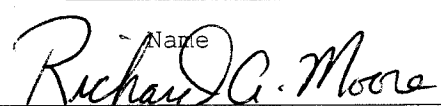
II. IMPACTS ON THE PHYSICAL ENVIRONMENT	
in the area? Are there other activities nearby that will affect the project? Are cumulative impacts likely to occur as a result of this proposed action?	
13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA: Are there other studies, plans or projects on this tract? Are cumulative impacts likely to occur as a result of other private, state or Federal actions that are under MEPA review (scoping) or permitting review by any state agency within the analysis area?	[N]

III. IMPACTS ON THE HUMAN POPULATION	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
14. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N]
15. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N]
16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number. Are cumulative impacts likely to occur as a result of this proposed action?	[N]
17. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue? Are cumulative impacts likely to occur as a result of this proposed action?	[N]
18. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed? Are cumulative impacts likely to occur as a result of this proposed action?	[N]
19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N]
20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract? Are cumulative impacts likely to occur as a result of this	[N]

proposed action?	
21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing? Are cumulative impacts likely to occur as a result of this proposed action?	[N]
22. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N]
23. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N]
24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES: Is there a potential for other future uses for easement area other than for timber management? Is future use hypothetical? What is the estimated return to the trust? Are cumulative impacts likely to occur as a result of this proposed action?	[N]

EA Checklist Prepared By: Chuck Maddox Land Use Specialist 5/30/06
Name Title Date

IV. FINDING	
25. ALTERNATIVE SELECTED:	Alternative 1, to allow the applicant, Vigilante Electric Cooperative, to place an overhead electric transmission line at the proposed location and grant them an easement for the new line to the newly constructed Wisdom wastewater treatment facility.
26. SIGNIFICANCE OF POTENTIAL IMPACTS:	Any disturbance to the site as a result of the proposed project will be recontoured/reseeded as necessary by the applicant, Vigilante Electric Cooperative.
27. Need for Further Environmental Analysis:	
<input type="checkbox"/> EIS <input type="checkbox"/> More Detailed EA <input checked="" type="checkbox"/> No Further Analysis	

EA Checklist Approved By: Richard A. Moore Dillon Unit Manager

 Signature Date 6/14/2006

APPLICATION FOR RIGHT OF WAY EASEMENT FOR UTILITIES OVER,
UNDER, ALONG OR ACROSS STATE LANDS

(Non-Refundable Application Fee -- \$50.00)

NOTE: Easement requests are processed on a first come, first served basis. Department review of complete application packages may take a minimum of 120 days. Incomplete applications and those requiring further information may take longer.

_____ Montana, _____, 20

To the State Board of Land Commissioners

- Montana Department of Natural Resources and Conservation

Application is hereby made under the provisions of Title 77, Chapter 2, Section 101 of the Montana Code Annotated,
by Vigilante Electric Cooperative, Inc. of
Dillon, MT for a right of way easement
for the purpose(s) of Providing three phase electric service to the Wisdom Sewer District Lagoon & Pict
_____ through _____, Section 34 & 35, Township 2 S, Range 15 W
, County of Beaverhead

Duly verified quad maps in duplicate accompany this application and are made a part hereof. The tract or strip of land required for the said right of way is more particularly described as follows:

A tract or strip of land 20 feet wide, 10 feet on each side of a centerline described as follows:

DESCRIPTION

Beginning at the west one quarter corner of Section 34, T2S, R15W, P.M.M., thence, N 34° 21' 31" E - 1690.23 feet, thence, N 7° 31' 55" W - 723.97 feet, thence, S 82° 26' 16" W - 1156.01 feet, thence S 07° 32' 56" E - 39.97 feet to the TRUE POINT OF BEGINNING, thence first course S 82° 28' 50" W - 268 feet, thence second course S 46° 41' 38" W - 1165 feet, thence third and final course S 81° 46' 21" W - 300 feet to end of state lands.

Said easement area contains .8 acres.

An application packet must contain all of the following - Please check box when completed.

- \$50.00 Application Fee Enclosed
- Original and one copy of application signed by authorized representative of applicant
- Affidavit completed, found monument corner appropriately described (i.e. brass cap, aluminum pipe, etc. with notation of inscription, if any)
- Copy of corner recordation form or other support documentation as found in county courthouse
- • • Quad map - • • • 's shown, found corner identified, acreage taken and remaining from each • • • , North arrow and scale; OR GPS Survey - affidavit signed by licensed surveyor or licensed professional engineer, which includes model of unit and level of accuracy
- Centerline Description (Must begin and end with a tie in to the found section corner)
- Lessee settlement signed by all parties to the lease.
- Statement of necessity, what other routes were considered, why rejected.
- If overhead facility, type of line (distribution/transmission), number of poles to be used (single or double construction), number of guys and anchors and voltage of line, if electric.
If pipeline, diameter of pipe stated?
- Stream/river crossing - list attached of other navigable river permits applied for and current status. If waived by other state or federal agencies, attach letter of waiver from authorized agent.

Name of Applicant Vigilante Electric Cooperative, Inc

Tim Myllymaki

Signature of Authorized Signatory

Title

Engineer

Address

P.O. Box 1049 Dillon, MT 59725

AFFIDAVIT

I Tim Myllymaki, the person who prepared the attached exhibit for easement for which application is hereby made, do hereby certify that the description of the right of way as given in this application is accurate and correct in every particular and that the monument referenced herein described as follows:

Aluminium Cap at the west one quarter Corner of Section 34, T2S, R15W,

P.M.M.

Dated at Dillon, this 5th day of April, 200 6.

Tim Myllymaki

Signed

Title

Engineer

STATE OF _____)

County of _____)

On this 7th day of April, in the year 2006, before me Ralph Dreyer, a Notary Public for the State of Montana, personally appeared Tim Myllymaki known to me to be the person whose name subscribed to the within instrument and acknowledged to me that he executed the same.

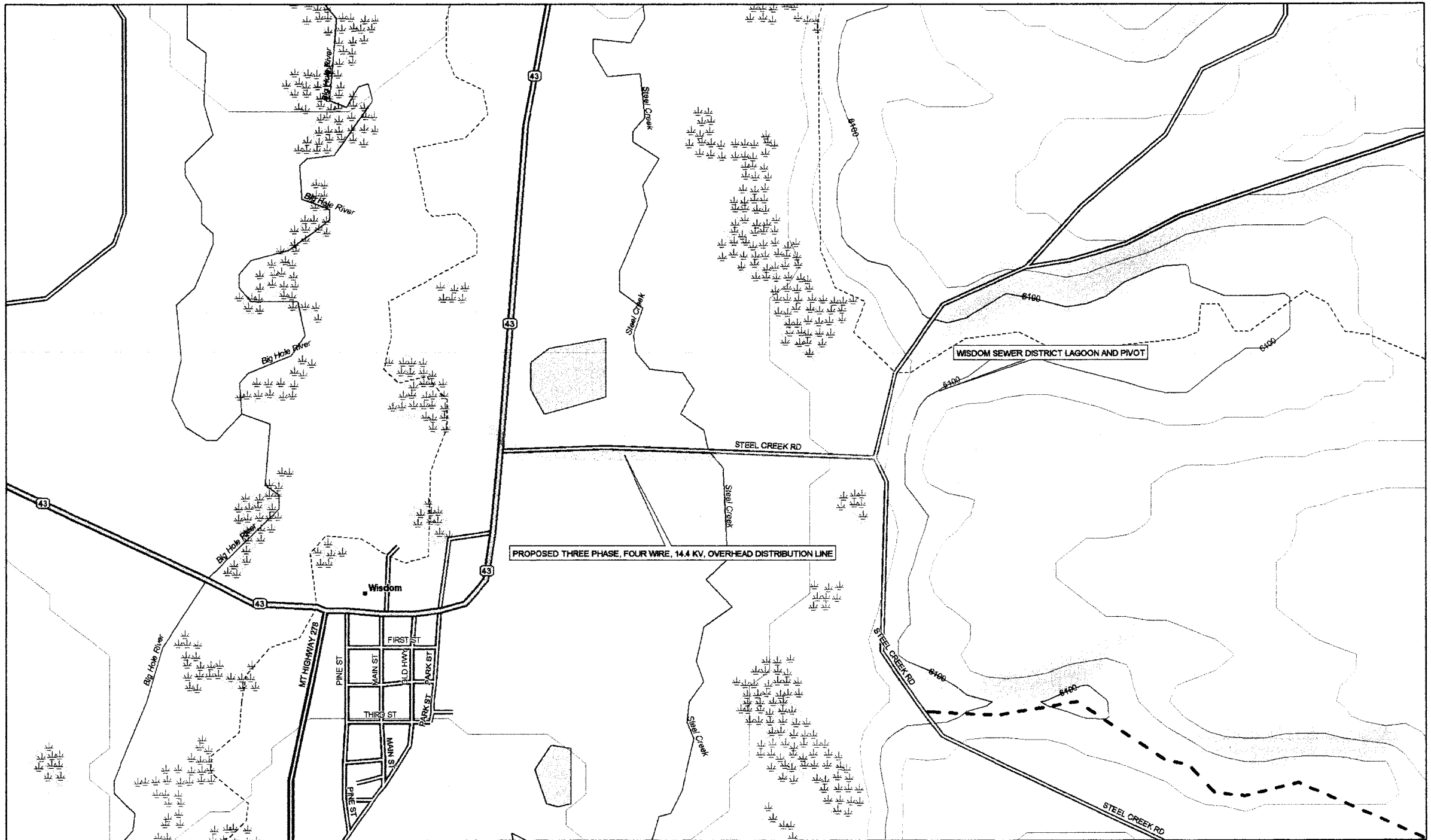
IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year in this certification above written.

Ralph Dreyer

Notary Public for the State of Montana



Residing at Dillon, MT

My Commission Expires 2-28-07



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Scale: 1 : 12,800 Map Rotation: 0° Magnetic Declination: 1.5°W

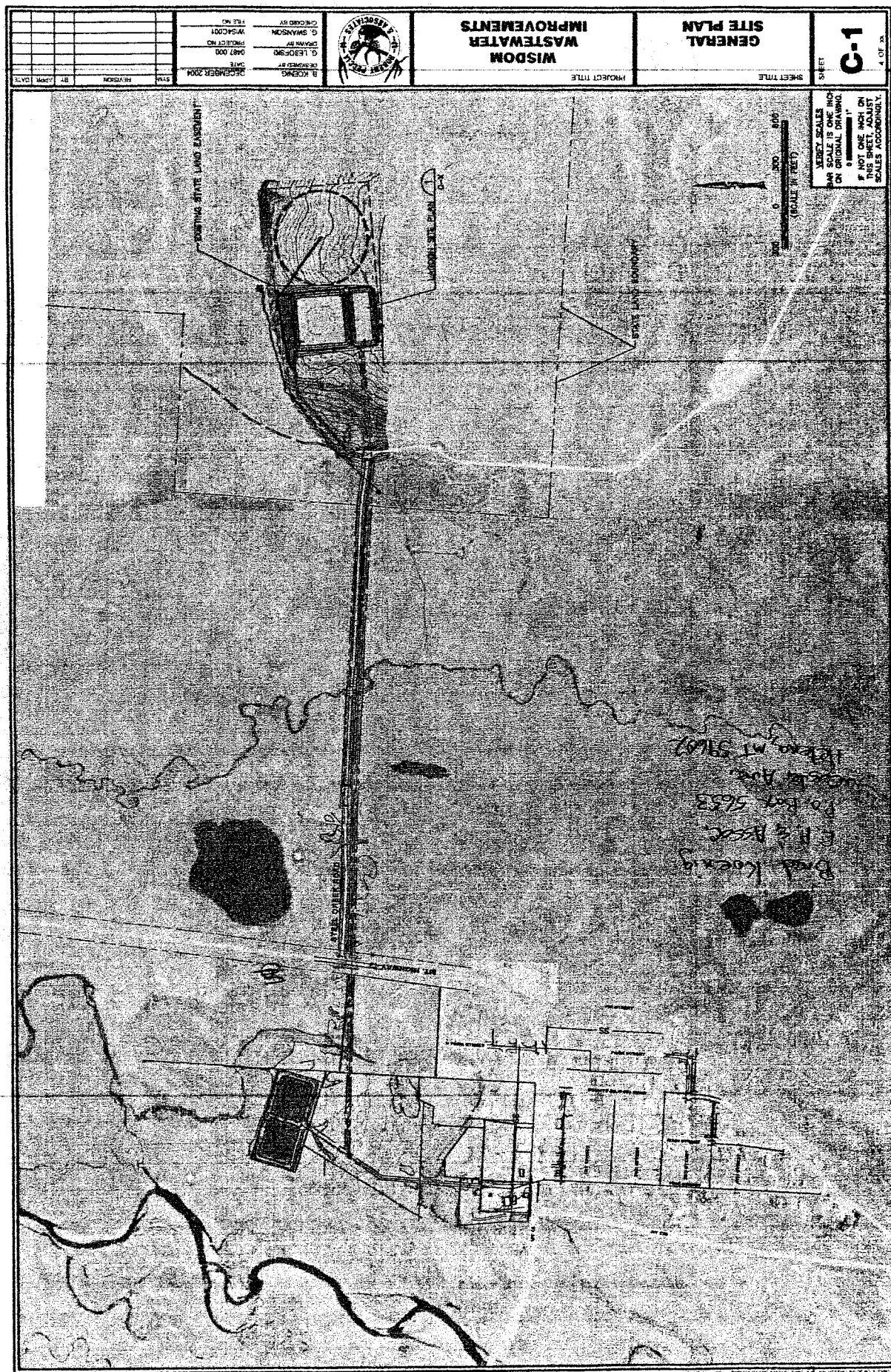
 G.S. account 50 kVA 5.5¢/kWh + 45^{0.00}
 I.R.E. account 50 kVA 5.5¢/kWh + 3.85¢ + \$105¹²

△ IRR account 50 kVA 5.5¢ / 3.85¢ + \$105⁰² kWh

2/30 H.P. Pumps.

$\pi \cdot 4000' \vee \phi @ 1 \frac{1}{2}'' = 16,000 \frac{lb}{ft}$

240/480 open 12/1/75



Vigilante Electric Cooperative proposes to build approximately 1,733 feet of overhead distribution line to serve the Wisdom Sewer District Lagoon and Pivot. Construction will be single pole three phase, 3-wire operative at 14.4 KV. Seven poles and four guys with anchors will be necessary.

No other routes are available.

NOTICE OF SETTLEMENT OF DAMAGES

TO: DEPARTMENT OF NATURAL RESOURCES
____ Unit or ____ Area Office
ADDRESS:

RE: State Lease # 3952

I have been informed that Vigilante Electric Cooperative, Inc
of Dillon, MT is applying
for a Right of Way over, under, along or across the following State Lands:

T2S, R15W, Sections 34 & 35

for the purpose of Providing Three Phase Electric Service to
the Wisdom Sewer District Lagoon and Pivot

As the Lessee of the State Land described above, I/(we) understand that if the easement is approved by the Land Board, that I/(we) as leaseholder am/(are) entitled to compensation for damages, that may occur to my/(our) improvements, crops, or leasehold interest.

I/(we) also acknowledge that the said compensation, if any, is for actual damages only and that compensation should not exceed the actual value of the damages to my/(our) improvements, crops or leasehold interest.

I/(we), the undersigned hereby state that

☒ No damages are anticipated.

____ Damages are anticipated and compensation has been received based on anticipated damages.

____ Damages are anticipated and arrangements have been made for compensation.

____ Damages are anticipated and the applicant & I (we) are not able to agree on the value of the damages. Attached is a listing of my/(our) improvements, crops and/or statement of what portion of my/(our) leasehold interest will be damaged and my estimate of value for compensable damages.

Signed this 1 day of APR, 2005.

CRAVE RANCH L.P. By [Signature]
(Lessee) (Lessee)

____ (Lessee) (Lessee)

(NOTE: All persons named on the state surface lease must sign this settlement statement. If a person is signing on behalf of another, copies of a Power of Attorney must be provided. Additionally, if a person has signed on behalf of an estate, Personal Representative papers must also accompany this form.)